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THE AMERICAN ELEVATOR AND GRAIN TRADE

Established 1882

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Established 1882

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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

One Dollar Per Annum
SINGLE COPIES, 15 CENTS

VOL. XXXIX.

431 South Dearborn Street, Chicago, Ill., December 15, 1920

NO. 6

WE ARE PROGRESSIVE ENOUGH
TO BE AGGRESSIVE FOR YOU

McKENNA & DICKEY
Grain

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Established 1877

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Covers all markets. Ask for the weekly or
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LETTER

Established 33 Years

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Specialize in all

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SHIPPERS. Send Samples for Bid.

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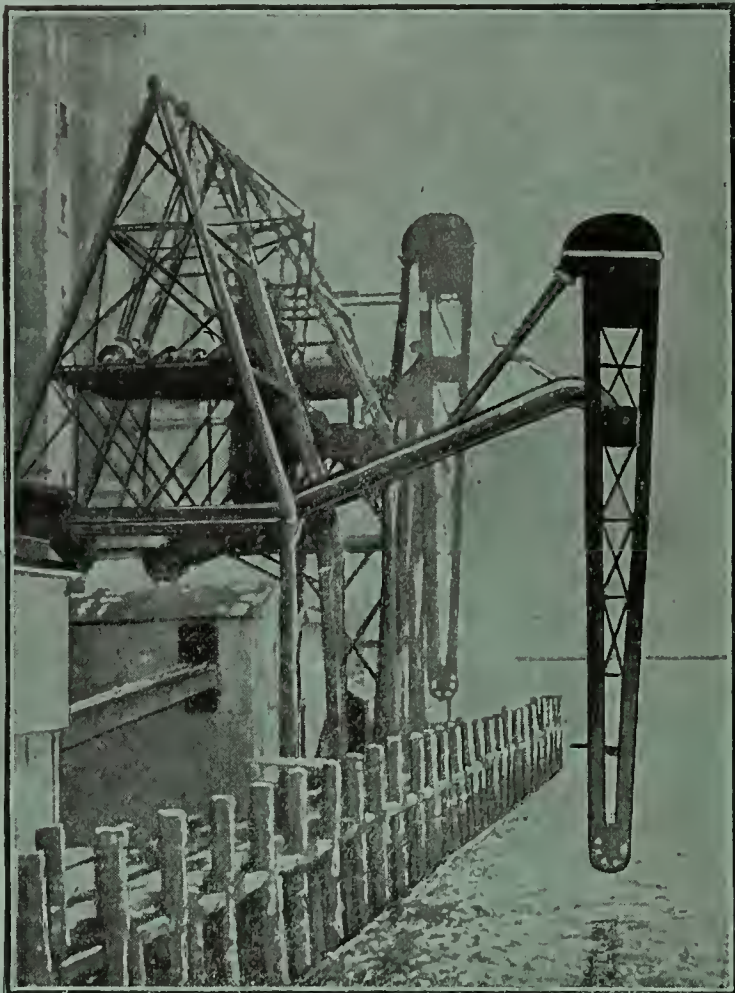
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USE IT
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Making Records Where Other Belts Have Failed

THESE things happen consistently with Diamond "Grainvey" and "Elevay" grain elevator belts.

The reason is not only because Diamond makes a superior belt, but because Diamond makes just the right belt for the particular work that must be done.

For the service illustrated above, "Elevay" is the belt par excellence. This is what one of our customers has to say about it:

"At our elevator we used your grain belt on one of our lofters for seven years, and we have another of your belts used in our loftier which is still working. We also used one of your belts on our marine leg for three years, and it handled 20,000,000 bushels of grain."

Consult a Diamond salesman and he will give you valuable information about grain elevator belts.

THE DIAMOND RUBBER COMPANY, Incorporated
Akron, Ohio

**It's a
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Diamond Grain Elevator Belts

Christmas Shopping for Machinery

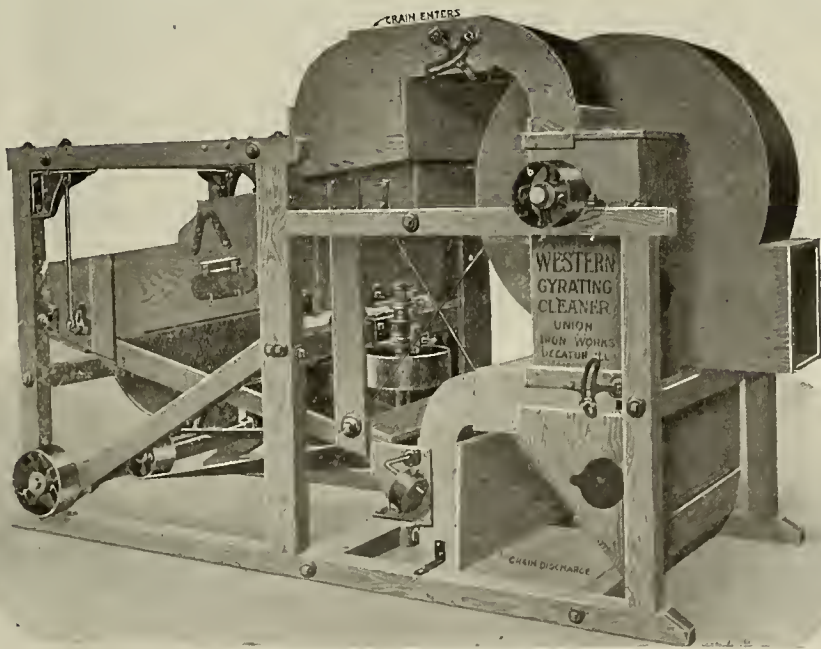


"Western" Pitless Sheller

"Do your Christmas Shopping early" applies to your needed elevator equipment as truly as it does to gifts for wife, children and friends. Therefore our

distinctive personal service in making prompt shipments will be rendered just the same preceding holiday week as at any time during the year.

Our entire organization joins in sending the season's greetings to our ever expanding line of patrons and our desire to please by exceptional service will know no abatement during the coming year. We shall also continue to manufacture and sell the best lines of grain elevator machinery that money can buy. Write, wire or telephone your needs.



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Complete Line of Shellers and Cleaners Kept at
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We are
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Now is your chance to buy if you have
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We are reducing our prices because we
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Modern, 500-600 bushels per hour corn degerminating unit, also, the largest and most complete combination stock and poultry feed plant in the world, having a capacity of 40-50 cars per day.

Modern in design and especially flowed for maximum output with minimum amount of power and operating expenses and no waste.

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Home of the Cincinnati Grain and Hay Exchange

A Few Reasons Why Shipments of Grain and Hay to Cincinnati Pay Best

First.—It has the "square deal" plugging system for hay.

Second.—It has reconsignment and transit privileges as well as other favorable points necessary to the most successful handling of grain or hay shipments.

Third.—As the terminal points for 200,000 miles of railways it is a convenient shipping point for the country dealer, and local buyers are enabled to distribute all products quickly and to best advantage.

Fourth.—The market embraces in its membership young, energetic, and capable grain merchants, who are at all times working indefatigably for the interest of their patrons.

Ship your grain and hay to any of the following representative and responsible grain merchants, all members of the

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A. BENDER, Flour, Grain and Feeds
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THE D. O. CROSS CO., Grain, Hay, Mill Feeds
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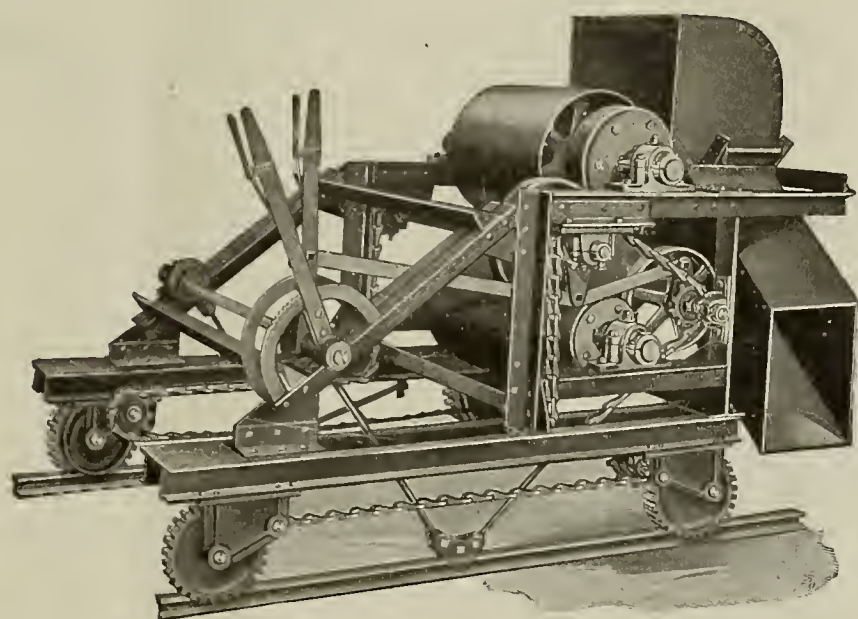
DORSEL GRAIN CO., Grain and Hay
EARLY & DANIEL CO., Hay, Grain, Feed
FITZGERALD BROS. CO., Grain and Hay
GALE GRAIN CO., THE A. C., Grain and Hay
DAN B. GRANGER & CO., Hay and Grain
MUTUAL COMMISSION COMPANY, Strictly Commission
THE NUTRITIA COMPANY, Feeds



Trade Mark of Quality

MODERN GRAIN ELEVATOR EQUIPMENT

WELLER HEAVY DUTY SELF PROPELLING TRIPPERS (PATENTED)



IN A CLASS BY THEMSELVES

Embodies features not found in any other
Fully protected by patents

Impossible for the belt to catch in the friction and
cause an accident

Large pulleys help to add to the life of the belt, while the wide clearance on each side of the belt and the arrangement of the double friction being such that it is practically impossible for the belt to catch in the friction.

Weller's Trippers are doing duty in some of the largest elevators. They have stood the test.

Every Elevator Should Be Equipped with Weller Continuous Grain Dryers and Coolers

FOR YEARS

The Weller Manufacturing Company have specialized in the design and manufacture of modern equipment—the better kind—for the mill and elevator.

It is a matter of pride with us that customers who have put Weller made equipment to the test when enlarging or building additions to their plants specify our goods.

Endurance Is the Test of Quality

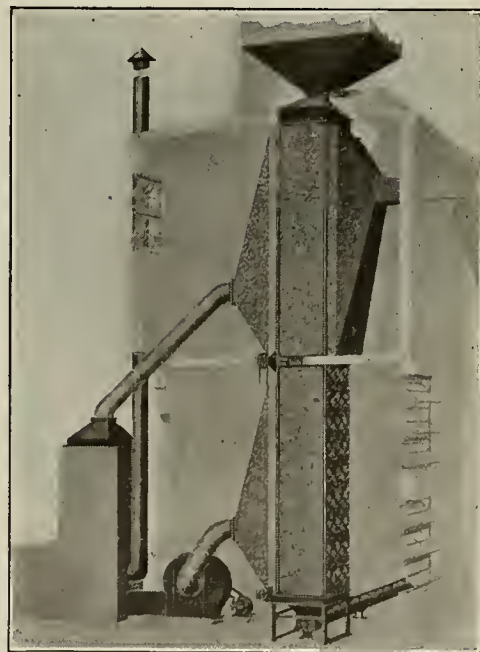
Weller Made Equipments Will Stand the Test

Send Us Your Orders for

Belt Conveyors, Drag Conveyors, Pan Conveyors, Ribbon Conveyors, Spiral Conveyors, Elevator Buckets, Bucket Elevators, Elevator Heads, Elevator Boots, Elevator Casings, Power Shovels, Distributing Spouts, Car Loaders, Car Unloaders, Car Pullers, Wagon Dumps, Truck Dumps, Grain Driers, Rope Drives, Friction Clutches, Pulleys, Hangers, Bearings, Gears, Weller Made Steel Chain, One Man Elevators.

Encourage the Farmer to come to your elevator and help your community by installing a Weller Continuous Grain Dryer and Cooler. Take care of the crop in off seasons when the damp, rainy, muggy weather sets in before the grain has matured. Many a farmer has been ruined and the elevator has lost money by not being properly equipped to take the moisture out of the grain.

The Weller Dryers and Coolers will do the work. They are built on scientific principles and will meet the requirements of the small country elevator or the large terminal houses and mills.



Weller Continuous Grain Dryers
Bulletin No. F101
"Scientific Methods of Drying Grain"
Sent on Request

WELLER MFG. CO. CHICAGO

New York

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San Francisco

Salt Lake City



The dynamic character of the Indianapolis market reaches to all receiving centers, making it the logical shipping point from central territory.

It attracts grain from the vast central arable plains and has proper connections with excellent billing facilities to all points, East, West, North, South.

The location and natural advantages of Indianapolis as a grain receiving and shipping center, therefore, makes it the best market in the country.

Ship your grain and hay to any of the following firms, all members of the

INDIANAPOLIS BOARD OF TRADE

BIG FOUR ELEVATOR CO., Merchandisers of Grain
 BINGHAM-HEWETT-SCHOLL CO., Grain Merchants
 BELT ELEVATOR & FEED CO., Grain Commission
 BERT A. BOYD GRAIN CO., Grain Commission
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 WM. R. EVANS GRAIN CO., Brokers and Commission
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 MERCHANTS HAY & GRAIN CO., Hay, Grain, Feed
 NATIONAL ELEVATORS, Every Branch of the Grain Business
 STEINHART GRAIN COMPANY, Grain Commission
 URMSTON GRAIN CO., Grain Commission
 FRANK A. WITT, Grain Commission and Brokerage

Milwaukee House Assured Dependable Operation

Morse Silent Chain Drives Minimize Power Problems for the Operators of the Northwestern Railroad Elevator at Wisconsin's Chief Port

THE next decade will witness an amazing change in the traffic on our Great Lakes. When the selfish objections of New York shall at last be silenced and the St. Lawrence deep waterway will have been completed, the world's merchant marine will travel our inland waters as today they sail the Mediterranean.

This development was not anticipated when the Chicago & Northwestern Railroad Elevator at Milwaukee, Wis., was built. The world was at war, although we had not yet become involved, and Canada was in no position to consider domestic improvements; even the Welland Canal had been abandoned for the time being. The United States had not realized how inadequate its railroads were to handle the country's business in the crisis that developed, so it is reasonable to suppose that the

the grain from the pits to three 15,000-bushel legs which elevate it to three concrete garnerers in the cupola of the warehouse.

The distribution within the house is by 36-inch conveyor belts, about 8,800 feet of belting being utilized in the elevator.

But what moves the belts; what of the power that energizes this mass of steel and concrete, that creates a working force of inert iron? And how is that power carried to the working parts? In the answer to this last question lies the whole secret of successful operation.

Power transmission has always been taken as a matter of course by the majority of elevator operators, and indeed, by most engineers. They accepted what the preceding generation used, usually without question. But from time to time there

"straps" were nothing more than that, but they marked an improvement over the multiple gears. Improved belting, both leather and fabric followed, and rope came to be used extensively, but not until chain or metal belt, working on sprockets, was evolved was the trade blessed with a drive which is as positive as gears, but with far greater flexibility, and able to operate on short centers and practically without noise.

With the increased use of electric power, the silent chain drive has become indispensable. The Milwaukee elevator is operated exclusively by electric power, having 62 Allis-Chalmers Motors ranging from 3 to 150 horsepower. High speed, Morse Silent Chain Drives are used for transmitting the power.

This drive, the latest development of engineering



THE CHICAGO & NORTHWESTERN RAILROAD ELEVATOR AT MILWAUKEE, WIS.

Northwestern Railroad did not foresee the demand for waterway transportation that later developed, and built solely for the immediate future.

For some years Milwaukee had been making steady progress in grain receipts and shipments and there was demand for a new elevator which could handle both rail and lake business. So the railroad company built its new house at the mouth of the Kinnickinnic River, with a concrete dock 1,174 feet long at which the largest lake freighters can berth, exceptional rail facilities, a bleacher, a drier, and a working house and storage tanks with a capacity of 1,250,000 bushels. The construction work was done by the Barnett & Record Company.

The handling equipment of the house is designed for the utmost convenience and speed. There are three receiving pits under each of the four tracks in the car shed, one pit under each discharges to the same belt conveyor, the valves of the pits being provided with an interlocking system so that only one pit can deliver on the belt at a time. Three receiving belts carry

have been restless intellectual spirits who looked for something better than the past had to offer.

In its earliest stages transmission knew only the gear. From the jackshaft of a water wheel or engine, a miter gear turned a cumbersome upright shaft which extended to the top of the building, the line shaft on each working floor being turned by another bevel or mitre gear. This was the universal means of transmission until about 100 years ago, when some engineer, it is hoped he was not permanently deafened by the racket while investigating the problem, conceived the idea that some of the torsion strain could be taken from the upright shaft if a main shaft at the top of the house, connected by gear with the upright, should transmit the power to the line shafts on the various floors by straps. He successfully demonstrated his theory, and this rig was used for many years. The

experts, is rapidly becoming standard equipment for every sort of industry. In elevator operation the chain drive has such obvious advantages over other forms that hardly a plant has been built in recent years that chains have not been used. Where a single power unit distributes the power throughout the house, of course, ropes are used largely on the main drive, but with motor equipment there is hardly ever an argument and Morse Chain Drives are installed as a matter of course.

With the increase which is anticipated in lake shipping the Milwaukee Elevator is ready to handle the maximum amount of grain for which it was designed. The elaborate conveying belt system driven by Morse Chains can be relied upon absolutely to perform their duties, economically, speedily, surely. There is a sense of security in this equipment which is worth much to the elevator operator.

This is fully appreciated by the Updike Grain Company, which operates the plant, and knows the physical problems of grain handling.—Advertisement.

MORSE CHAIN CO.

ITHACA, N. Y.

Engineering Sales Offices in Principal Cities

A TIMELY SUGGESTION

A MARKET to take care of your various needs—

A MARKET where you may sell your products—your **wheat, corn, oats, barley, rye, seeds, hay**, etc., receive the highest price, get the benefit of an excellent inspection and weighing service; where the usual and necessary time required for switching, unloading and final accounting for the property is reduced to a minimum—

A MARKET where you may buy your requirements in the **grain, seed or hay** line; or in the form of the manufactured goods, **flour—wheat or rye—corn products of all kinds, oatmeal and malt products**—

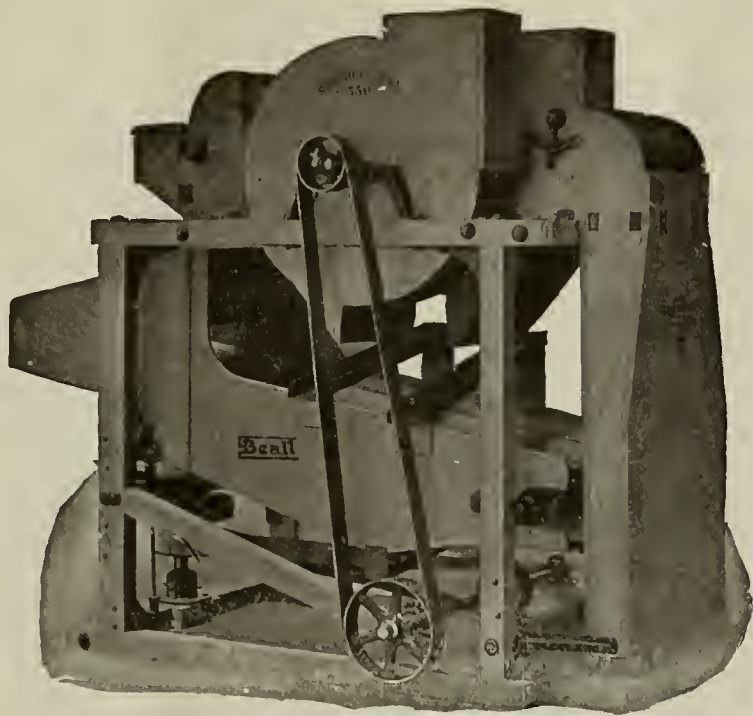
A MARKET where you can place your orders for the purchase and sale of “**futures**”, where hedging transactions are carefully and promptly executed—

SUCH A MARKET is

MILWAUKEE

And any information you wish will be supplied by

THE MILWAUKEE CHAMBER OF COMMERCE



Built in ten sizes

Beall
THE MARK OF QUALITY

The Beall Warehouse and Elevator Separators

close the year 1920 with a record for sales and service. Include these machines, Mr. Elevator Owner, in your machinery equipment for 1921.

THE BEALL IMPROVEMENTS CO., Inc.
Decatur - - - - - Illinois

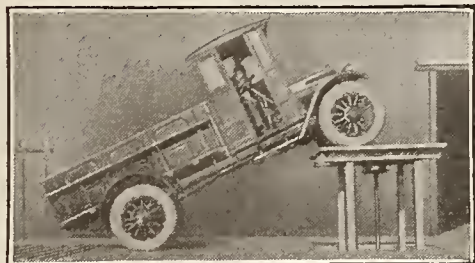
The ELLIS ROTARY DRIER BALL BEARING



THE illustration shows a No. 2 rotary drier semi steel steam head in process of manufacture. We use semi steel in place of iron because the pressure castings are subject to severe stresses on account of constant expansion and contraction. Semi steel has a tensile strength of 36,000 to 38,000 pounds per square inch and is therefore an ideal metal for the purpose. The use of semi steel increases the cost of production materially as it is a much harder material to drill and machine than the ordinary grey iron, but it aids in producing the highest grade rotary drier in the United States or anywhere. Specify the Ellis Drier on your next requisition.

The Ellis Drier Company, 332 South La Salle St., Chicago, U. S. A.

A TRAPP Truck and Wagon Dump

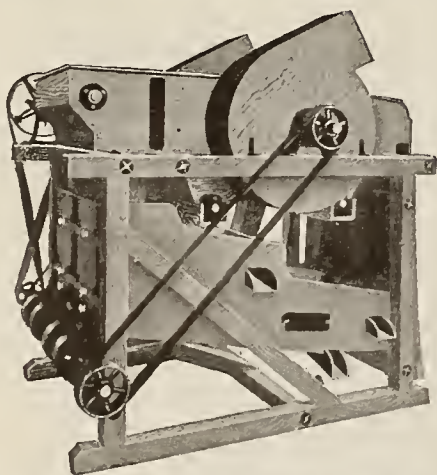


would give you just the kind of truck dumping service you want. First, you must consider the safety of the dumping system you buy. Safety is undoubtedly one of the main considerations; and the **TRAPP DUMPING SYSTEM** will operate without any accidents, or damage of any kind, to trucks or drivers. The construction of the **TRAPP DUMPING SYSTEM** is especially arranged so that all danger of shocks, jars, or injury to the trucks, is eliminated.

Compressed air is used to operate **TRAPP DUMPING SYSTEMS**. They work simply by your turning the air valve. The compressor can be attached to the line shafting at any place that is convenient. No expensive remodeling of your driveway would be necessary; furthermore, the installation of a new **TRAPP DUMP** would not hinder or delay your receipts of grain.

MAKE UP YOUR MIND NOW to get the best dumping system made; and, if you order a **TRAPP COMBINATION TRUCK AND WAGON DUMP**, you will have positively the best, as well as the safest. **WRITE FOR DETAILS**, descriptive circulars, with list of installations of **TRAPP DUMPS** in line elevators; also, reproductions of testimonials from many elevator operators, who use their **TRAPP DUMPS** constantly. **WRITE TODAY.**

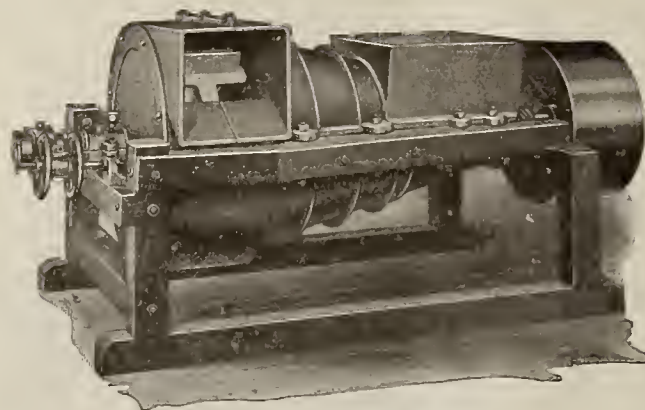
Trapp-Gohr-Donovan Co., Mfr's.,
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U. S. Twin Shoe Receiving Separator



Constant
Safety
Ball-Bearing
Man-Lift



U. S. Corn Sheller

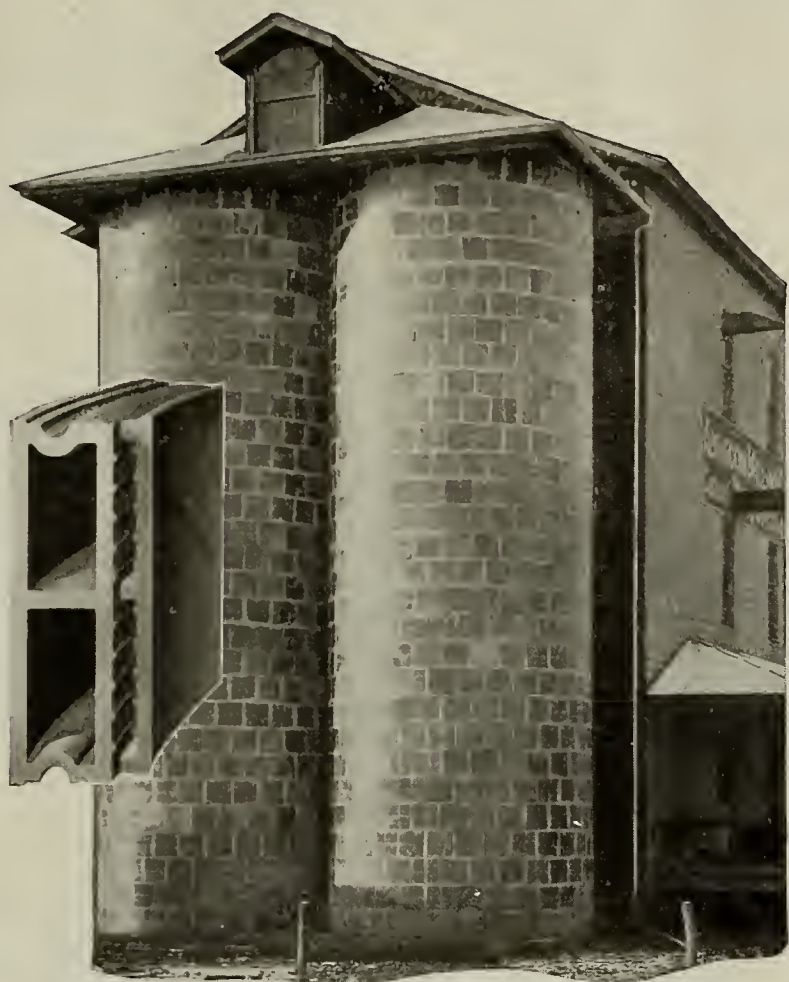
A Christmas Gift of the Right Sort

Make your grain elevator a present of the new, needed equipment to replace all the old, worn-out machinery. It will be noticed in the greater success and economy in the operation of the plant during the entire coming year.

Constant machines are noted for simplicity, reliability, and durability. They are giving satisfaction in very many grain elevators throughout the country. Try them.

We extend holiday greetings to our friends and patrons everywhere

B. S. CONSTANT MANUFACTURING CO.
BLOOMINGTON ILLINOIS



Grain Bins of the Abingdon Milling Co., Abingdon, Va.

The Construction That Defies Time

Vitrified tile is the ideal material for grain bins. It is fire proof, moisture proof, frost proof and vermin proof. Our special method of construction, bracing block against block, makes a bin that is practically indestructible. Between each tier of blocks is a thick layer of cement re-enforced with a twisted steel bar.

Preston Lansing Tile Grain Bins

will keep your grain in good condition. The dead-air spaces in each block afford protection against extremes of temperature. The tile finish makes a smooth wall inside and out—the grain settles better—the hard exterior defies wear and gives a beautiful appearance.

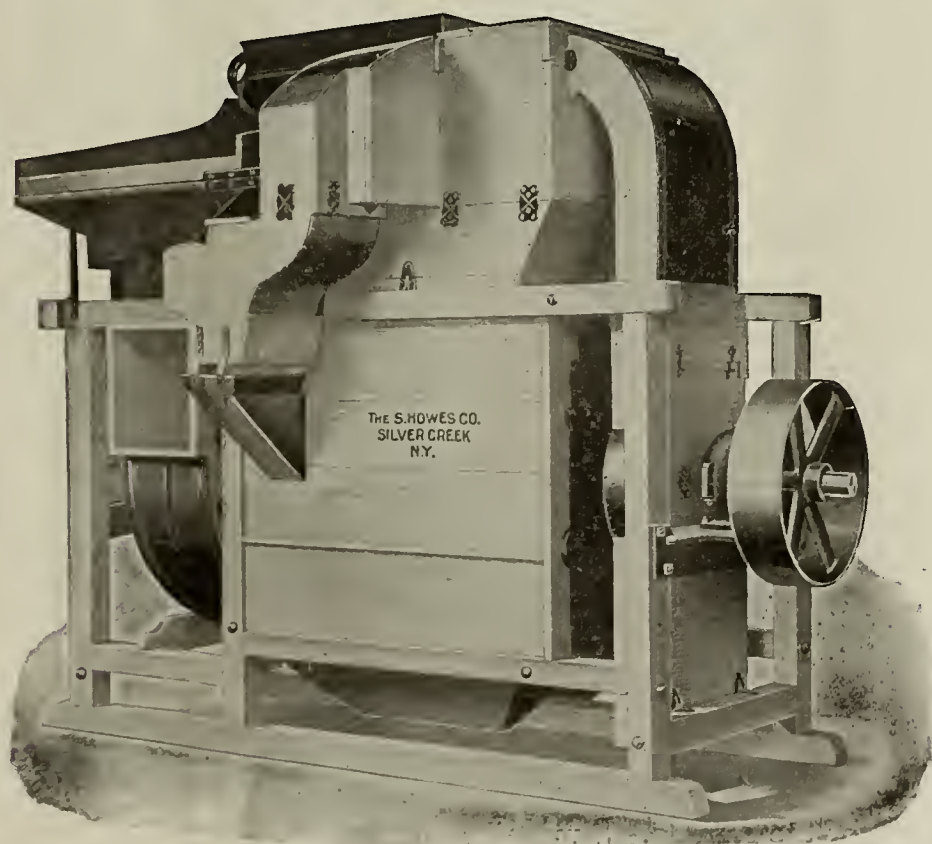
Preston Lansing Tile Grain Bins cost little per year of service. No repairs, painting or shrinkage. Let us tell you the whole story. Write for catalogue and prices.

J. M. PRESTON CO.

Dept. 426

Lansing, Michigan

Factories at New Brighton, Pa.; Uhrichsville, Ohio;
Brazil, Indiana, and Ft. Dodge, Ia.



Prepare for a lot of RUSTY OATS this winter

The best remedy is the "EUREKA" OAT CLIPPER

For Prices and Further Information Address

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J. Q. Smythe, 3951 Broadway, Indianapolis, Ind.
F. E. Dorsey, 3850 Wabash Ave., Kansas City, Mo.
J. P. Stoffel, 1042 Hyperion Ave., Los Angeles, Calif.
The Brinkley Company, Seattle, Wash.
C. J. Groat, 522 Board of Trade Building, Portland, Oregon.

Bulletin No. 68 tells all about it.



"The man who owns one knows—
ask him."

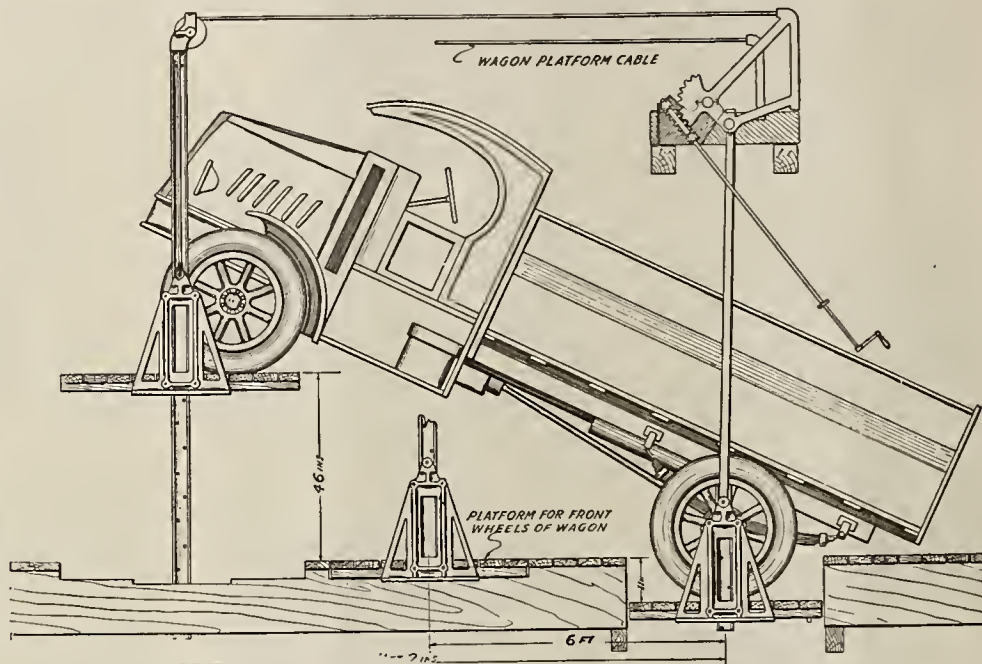


THE DOMINANT IDEA

The TRUCK DUMPING SYSTEMS in use today are as the earliest type of automobiles and aeroplanes. The dominant idea today tends towards power and labor-saving machinery.

Saving of power; dependability, quick action—all are combined in the NIPP GRAVITY TRUCK DUMP. Gravitation is one of nature's greatest elements. The earth itself is moved by gravitation.

Your loaded truck and wagon can be tilted and unloaded and brought back to proper position by GRAVITATION. Those who today are struggling with a power-driven device will be the first to let their wise judgment make the comparison.



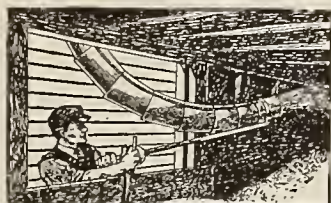
Write for explanation in detail, circulars and prices

Puritan Mfg. & Supply Co.

MANUFACTURERS

1014 North 17th Street

Omaha, Nebraska



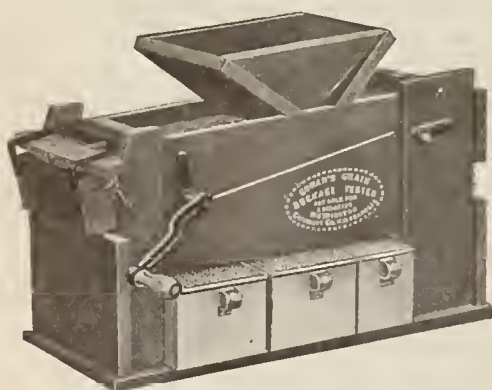
The Englehart Loader

Load Cars the Better Way

with an

Englehart Loader

Even loading from end to end may save expense of reinspection. A few loadings pay for it in savings.



The Cowan Dockage Tester

TEST FOR MOISTURE

OUR TESTERS ARE

Guaranteed Official Standard

Supply on Hand at All Times

In one, two, four, or six burners
For Gas, Alcohol or Electricity

We guarantee this to be strictly in conformity with Government specifications and standards as laid down in Bulletin 72, U. S. Department of Agriculture.

Test for Grain Dockage

with

The Cowan Dockage Tester

is reliable to the last kernel of the sample. Simple in construction, easy to operate, and rapid.

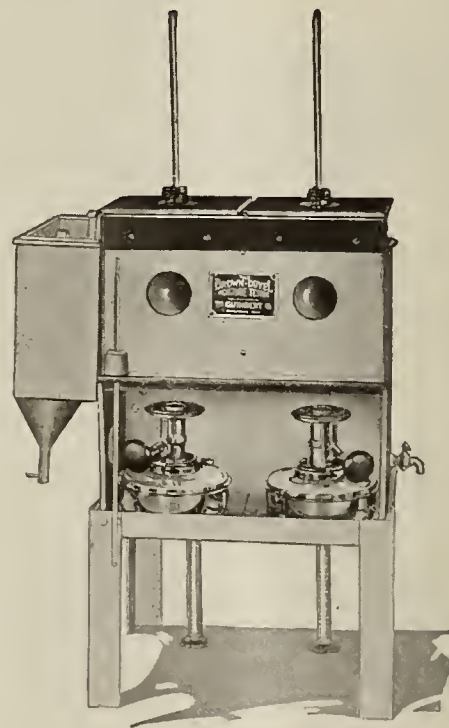
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THE CUTHBERT COMPANY

MANUFACTURERS

408 Corn Exchange

Minneapolis, Minn.





MONTREAL

John S. Metcalf Co.

Grain Elevator Engineers



MANCHESTER
ENGLAND



SYDNEY, AUSTRALIA.



BUENOS AIRES

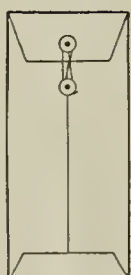
OFFICES

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54 St. Francois Xaxier St., Montreal, Canada.
395 Collins St., Melbourne, Australia.
314 Reconquista, Buenos Aires, Argentina.

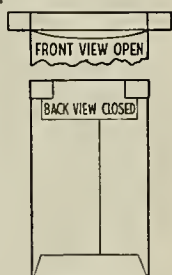


CHICAGO

EAGLE ENVELOPE CO.

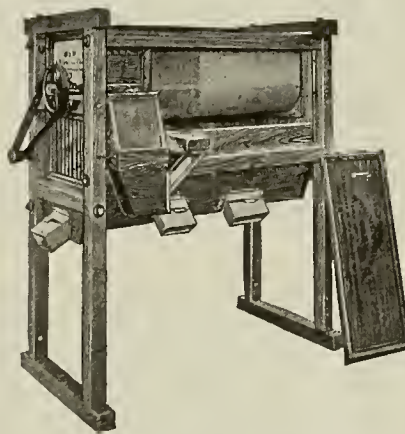


SEED MAILERS
GRAIN MAILERS
AND
ENVELOPES OF
EVERY DESCRIPTION



5 S. Wabash Ave.

Chicago, Ill.



U. S. Patent Sept. 29, 1914
U. S. Patent May 7, 1918

The Improved Economy Cracked Corn Separator and Grader

The machine needed by Elevators and Mills

- (a) It Separates into FOUR Distinct Products.
- (b) It Cleanses, Grades and Polishes.
- (c) It Removes Bran.
- (d) It Separates Meal from Cracked Corn.
- (e) It Produces TWO Cracked Corn Grades—Hen and Baby Chick Grades.

If interested, write for catalogue and samples of product with prices and terms to

THE LINKHART MFG. CO.
North Vernon, Ind.

The "Knickerbocker Cyclone" Dust Collector



For Grain Cleaners
ALL STEEL



Write for Catalog

The Knickerbocker Company

Jackson, Mich.

Reliance Construction Company

Furnish Plans, Estimates and Build
COUNTRY GRAIN ELEVATORS

Our long experience as a builder of elevators insures you an up-to-date house. Write today.

625 Board of Trade Building,

INDIANAPOLIS, IND.

Grain
Elevators
Feed
Mills



Mill
Buildings
Industrial
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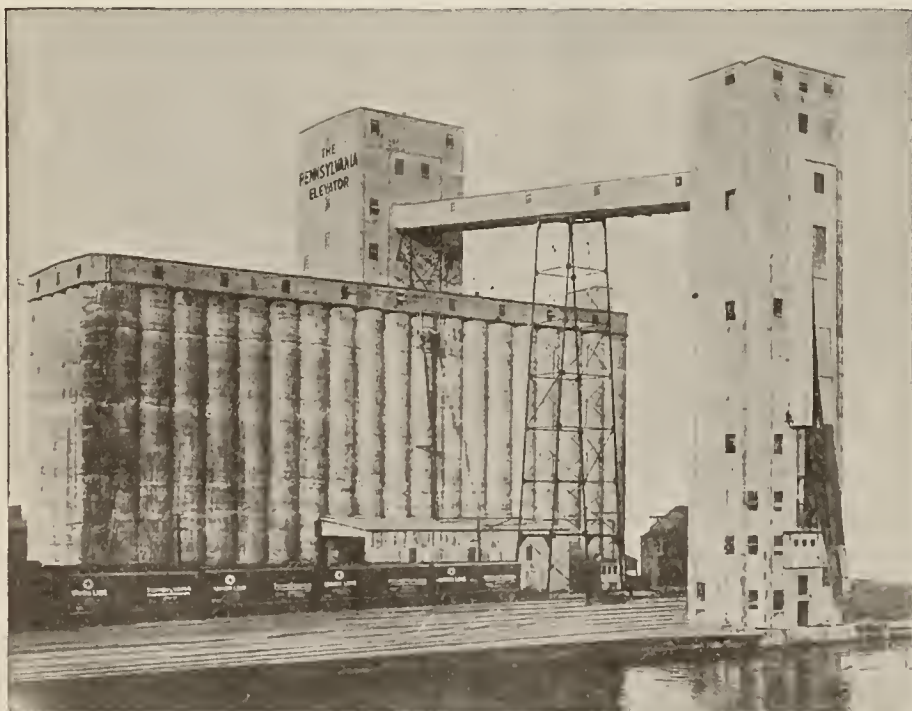
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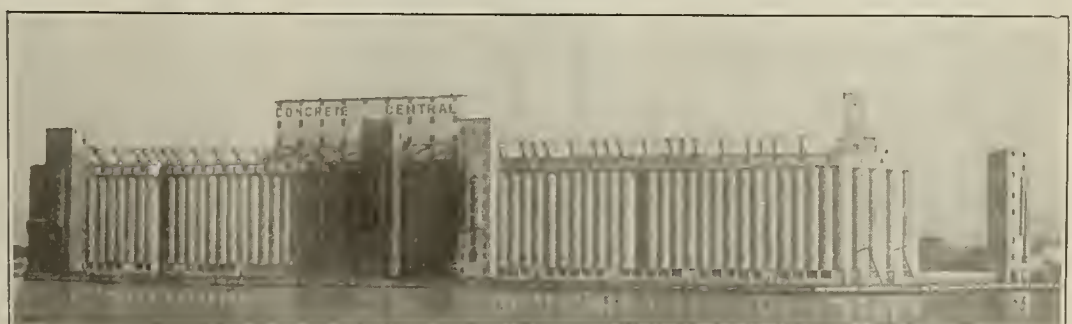
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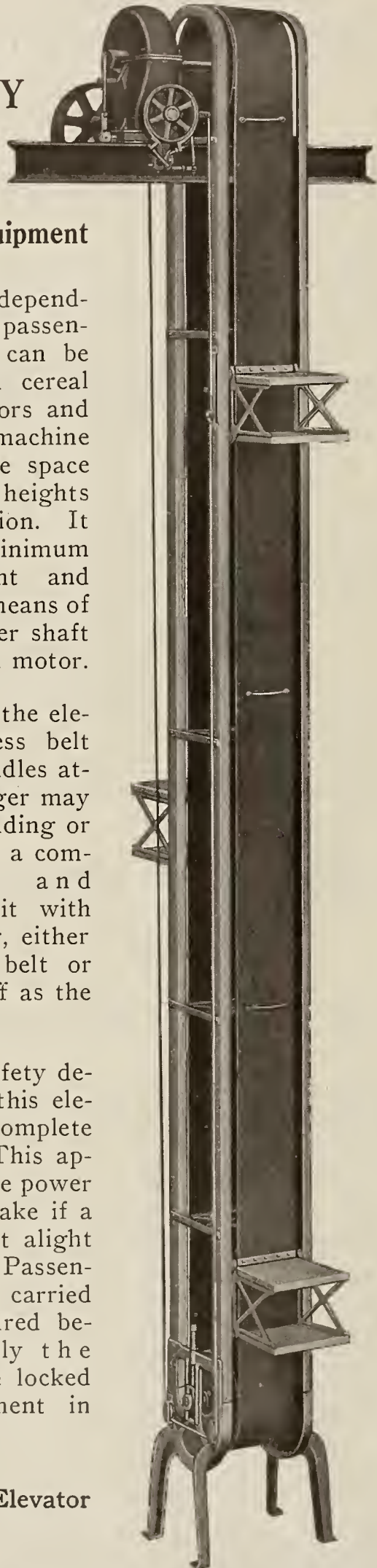
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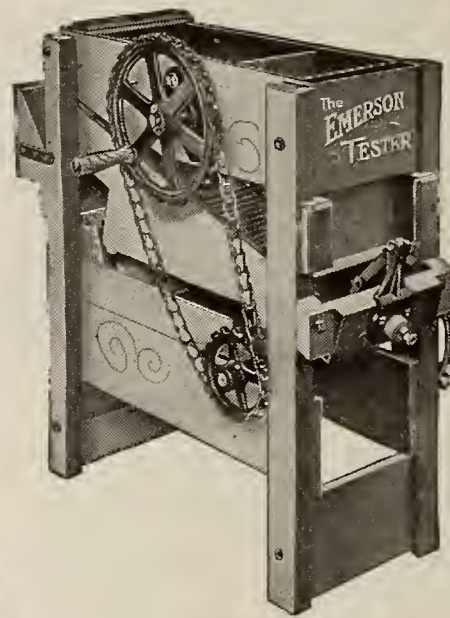
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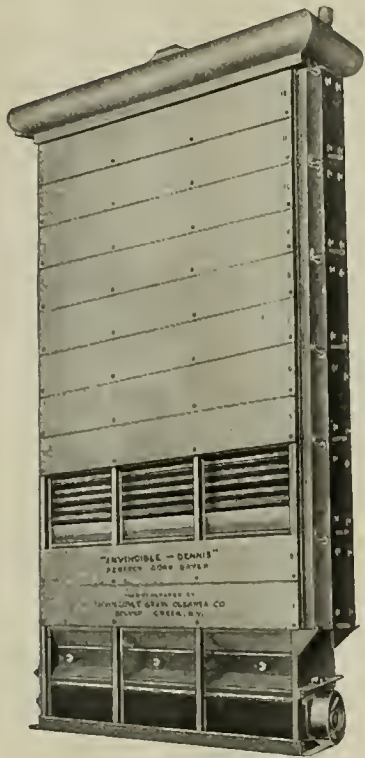
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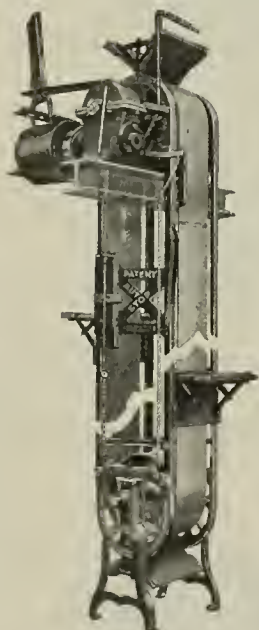
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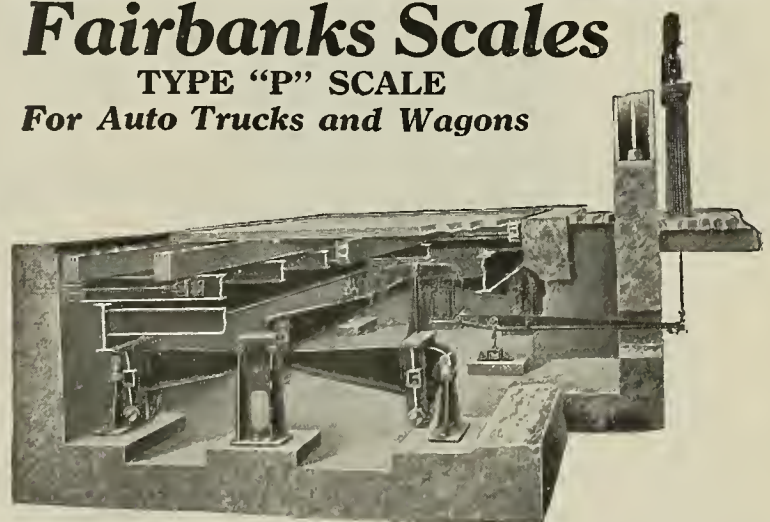
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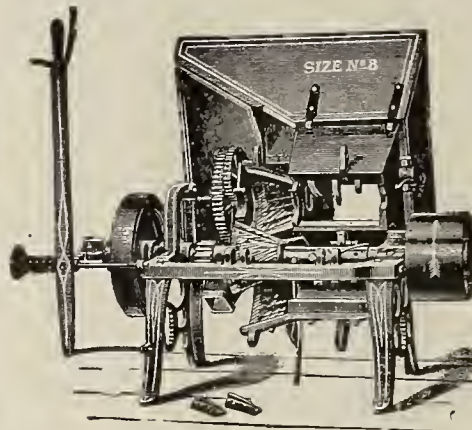
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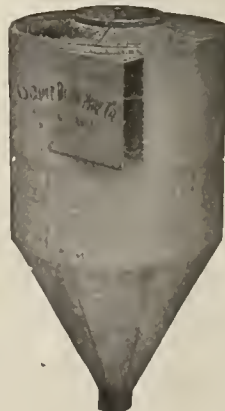
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Established in 1882.

VOL. XXXIX.

CHICAGO, ILLINOIS, DECEMBER 15, 1920

NO. 6

Reconstruction of Murray Elevator at Kansas City

The Shattered Plant, Destroyed by Dust Explosion Last Year, Presented Many Intricate Problems to the Engineers Who Rebuilt It

THE Murray Elevator of Kansas City, Mo., owned by the Burlington Railroad and operated by the Federal Grain Company, which was demolished by a dust explosion on September 13, 1919, has been rebuilt and turned over to the owners by the Burrell Engineering & Construction Company of Chicago.

The explosion which practically destroyed the plant, so far as its present usefulness was concerned, occurred at 2:00 o'clock in the afternoon when the full force of employees was at work. Fourteen lost their lives in the disaster, and as many more were seriously injured. The aggregate loss to the plant and contents was estimated at about \$500,000.

The 1,000,000-bushel terminal elevator consists of a workhouse 60 feet 4 inches wide by 165 feet long by 190 feet above base of rail; Annex "A," 18 tanks 21 feet 8 inches in diameter by 88 feet 5 inches high, with 10 interstice bins of the same height; Annex "B," 18 tanks 21 feet 8 inches in diameter and 88 feet 5 inches high, with 10 interstice bins; one drier building 18 feet 9 inches wide by 28 long and 58 feet high; one dust house 16x14 feet on the ground plan and 28 feet high; a power plant 49x88 feet in size and 30 feet high; and a track shed 48 feet wide, 180 feet long, and 28 feet above the base of rail. Some idea of the damage which was inflicted by the explosion may be gained by the insert in the engraving of the reconstructed plant.

Prior to commencing the reconstruction of this elevator, a very careful inspection was made by the Burrell Engineering & Construction Company's engineers. A complete record of all the damages was taken, after which a careful analysis was made of how to reconstruct the elevator so as to insure safety to all concerned, both during the

construction and after the elevator had been completed.

The elevator, which was filled with grain, amounting to approximately 1,000,000 bushels, had to be emptied before work could be started. This was another very important part of the work. The grain was removed from the elevator by constructing temporary elevator legs at the east end of Annex "B." The tunnel conveyor belts were re-

the time of the explosion. While the grain was being removed, the ground surrounding the elevator was being cleared of the debris.

The first story of the workhouse, which was the most critical factor in the reconstruction of the elevator, was enclosed by reinforced concrete. The interior columns and beams were not damaged to the extent that they need reinforcement and were left just as they were, but the wall columns, including curtain walls,

were blown out so that they were of no value. After shoring up the beams and bin slab which support the workhouse bins and cupola, these outside walls and columns were torn down and a new set of columns, surmounted by a heavy five-foot beam, was constructed to carry their respective loads.

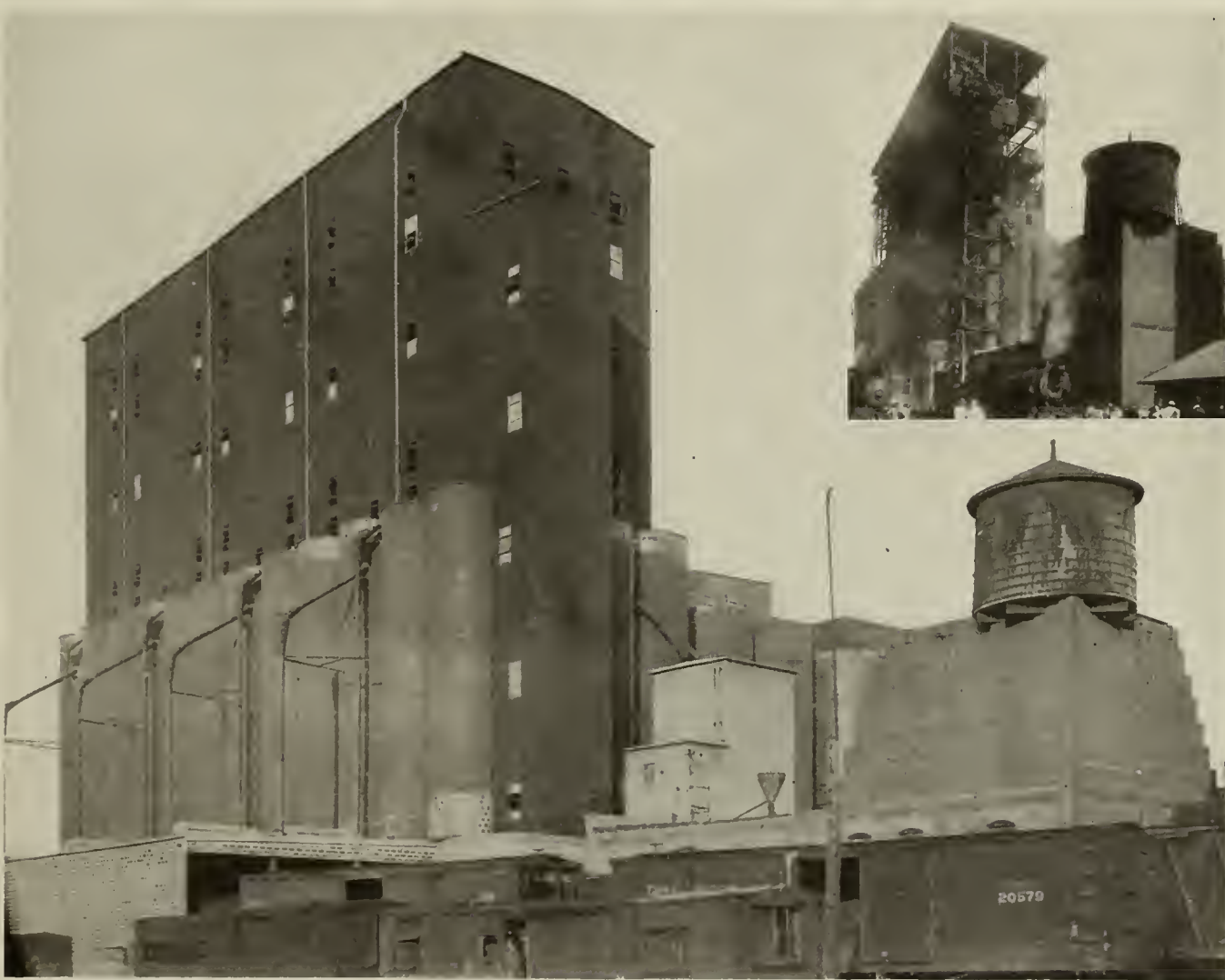
Exterior foundation walls and columns were also damaged to an extent which made it necessary to cut off the tops of several of them and replace them with new concrete caps.

In rebuilding the first story walls provision was made to connect large rolling shutter doors on both the east and west sides, so that the entire first story can be thrown open for ventilation. The ventilation was a very important item in the reconstruction plans of the Murray Elevator.

The steel and tile track shed was replaced just as it was, with the exception of placing large sized skylights on the roof.

The four receiving pits were also destroyed to an extent that several of the concrete walls had to be removed and replaced by new ones. The receiving hoppers, as well as the track beams, were entirely destroyed and had to be replaced.

The tunnel walls under the storage were badly cracked in many places and the top slab of the tunnel between the buildings was blown out, all of



RECONSTRUCTED MURRAY ELEVATOR AT KANSAS CITY. WITH INSERT SHOWING PLANT JUST AFTER THE DISASTER

versed and the grain spouted from the workhouse and storage onto these belts and thence to elevator legs and into cars for shipment to another place for storage. Temporary tracks were laid at the east end of Annex "B"; also a temporary track shed built so that the moving of the grain could be carried on rapidly.

The insurance company was on the ground, working in connection with the Burrell company, cleaning out all the debris which might have fallen into the grain, thus making it possible to secure the exact amount of grain which was in the house at

which had to be replaced. The tunnel ends which were blown out by the explosion were replaced with vent houses to give air circulation through the tunnels.

The circular bins in the workhouse were very badly cracked in many places; also large holes in the bins were broken out, due to the explosion, all of which had to be repaired or replaced.

The structural steel cupola surmounting the workhouse tanks was left in very good shape, with the exception of a few columns in the head story which were bent and had to be straightened. The tile workhouse walls which were entirely blown out were replaced by asbestos corrugated iron, furnished by H. H. Robertson & Co., of Pittsburgh, Pa., and fitted with steel semi-ventilating windows. The tile floors in the cupola were practically all blown out and were again replaced by tile. The center panel of the steel framing on the distributing floor was raised five feet to accommodate the new distributing system that was installed. The steel stair tower was also damaged very badly and was straightened and covered with asbestos corrugated iron.

Annex "A" and Annex "B," which are built of tile and surmounted by a steel cupola enclosed with tile, were not as badly damaged as the workhouse, the storage tanks being practically in good shape, but the steel cupola of Annex "A" was entirely destroyed and had to be reconstructed, while the steel cupola over Annex "B" was in fairly good shape, with the exception of replacing windows.

Two of the three steel bridges connecting the workhouse with Annex "A" were completely destroyed and replaced by new ones. The bridges connecting Annex "A" with Annex "B" were in fairly good shape with the exception of the corrugated iron cover being blown off.

The drier building, which was located about 60 feet from the workhouse, was completely destroyed, excepting, of course, the foundation. This drier building was replaced by a concrete structure and the same capacity drier installed as the original.

The dust house, which was constructed of wood and also very close to the elevator, was destroyed completely and rebuilt of wood with about twice the capacity of the old dust house.

The power house building and machinery were also very badly damaged by the explosion. The building was replaced to its original form, while most of the boiler and engine room equipment was removed, due to the fact that the plant was electrified.

The grain handling equipment which was originally operated from the steam plant by means of transmission rope, gears, and sheaves, was electrified and each of the drives was designed to be driven by means of motors and gears. This change was made on account of the high cost of operating the steam plant.

The cleaning machinery, located on the first floor, was also very severely damaged by the explosion, and it was found necessary to replace all of these machines by new ones. The entire first floor cleaning machinery consists of four No. 10 Monitor Warehouse Separators, four No. 10 Invincible Oat Clippers, and one Carter-Mayhew Disc Separator, all of which are driven by means of electric motor and belt.

The receiving conveyors, including concentrator rolls, belt, drive pulleys, and head and tail pulleys, were completely destroyed and had to be replaced. The shipping conveyors and rolls which were partly destroyed were replaced with whatever was necessary to put them in condition to handle the grain.

The car puller, which was located in the basement of the workhouse, was also almost ruined, and several of the machinery parts had to be replaced. It is being operated by means of a 50-horsepower motor through cast iron cut gears.

The first floor spouting which was entirely destroyed by the explosion, was replaced by a very elaborate system, enabling the operators to handle their grain in the most satisfactory manner. This entire net of spouting was constructed in the field.

The four receiving and the four shipping elevator legs, having a capacity of 10,000 bushels per

hour each, were also partly destroyed by the explosion. The explosion passing through the elevator legs evidently blew the legs apart and several of these legs had to be rebuilt or straightened to their normal shapes. The strange part about the elevator legs was that most of the cast iron in connection with the boot pulleys and gate operating mechanism were broken. This evidently showed that the elasticity of the structural steel did its work very well. This condition was shown with respect to the cast iron throughout the entire plant; for other examples, a large number of bin bottoms under the workhouse bin were entirely broken, as well as several tripper frames.

The upper sections of the elevator legs were also badly ruined by the explosion. It was proven that the explosion evidently carried up through the entire leg from the condition of the extreme upper sections of the leg heads. In many cases the covers on the elevator heads were blown off. The one particular leg which was carrying grain at the time of the explosion shows that the explosion carried on up through the leg and down through the garner into the scale. This was proven by the deformation of the steel garner and scale. All the scales were in fairly good shape, with the exception of one, which was deformed to practically a round shape from the square which it originally was. All scales had to be re-adjusted and scale beams put in good condition.

In several of the large elevator legs the buckets had to be replaced, due to both the explosion and previous wear and tear. The four cleaning legs of 3,000-bushel per hour capacity were in fairly good shape, with the exception of replacing some of the cast iron and the leg casing, which was destroyed by the blast.

The screenings and drier legs were also badly damaged and were remodeled without much difficulty. The upper distributing system was remodeled completely, there being originally only one 36-inch transfer conveyor belt, which transferred grain to the storage belts for storing grain into Annex "A" and Annex "B." This system apparently was a very slow means of handling the grain and was replaced by two 36-inch transfer belts raised up to a level of five feet above the original distributing floor and removing the old distributing floor. A series of telescope spouts were installed to receive the grain from both the scale and the reversible trippers on the transfer belts. There were three 14-inch diameter telescope spouts installed into each bay which has a scale. By making this change the distributing capacity of the plant was increased 50 per cent, and also making it possible to reach any bin in the house from any receiving sink. The eight 12-inch diameter car spouts were also completely destroyed and replaced by new ones.

The cupola storage belts were also badly dam-

aged by the explosion and fire, and the necessary parts were furnished to put the conveyor into operating condition again.

The large 10,000-bushel receiving and shipping elevator legs are driven by means of a counter-shaft on the scale floor, connected to the elevator head by means of rope and connected to the motor by means of cast iron cut gears. The cleaner, screenings, and drier leg are driven independently by motor, belt, and gears. All conveyors are driven by means of motor and cast iron cut gears.

The dust collecting system was installed as it originally was by the Cyclone Blow Pipe & Dust Collecting Company of Chicago. Every effort was taken to design and to install this system to collect as much dust as possible. The dust is blown from the main dust collectors, located outside of the workhouse, to the Cyclone over the dust house. Special pains were taken to furnish plenty of ventilation throughout the entire building at all times. It is evident that an elevator which is designed to allow plenty of air circulation is one that is less subject to explosion. Therefore, every effort was made to comply with this experience.

The power operating this plant is received from the Kansas City Light & Power Company, and brought down from a high tension line to 440 volts; the lighting system operates on 220 volts.

The motor equipment of the reconstructed elevator is as follows: Nine 75-horsepower motors, on the four receiving legs, on the four shipping legs and the Invincible Oat Clippers; seven 30-horsepower motors on four cleaner legs and three shipping conveyors; four 25-horsepower motors on the double barrel Clark Power Shovels and three storage conveyors; seven 15-horsepower motors on the screenings leg, the four Monitor Warehouse Separators, the Carter-Mayhew Disc Separator, and the screenings conveyor; five 7½-horsepower motors on the four receiving conveyors and on the passenger elevator. The motors were furnished by the General Electric and the Westinghouse companies.

It is known throughout the United States that there has never been such an explosion in the history of grain elevators, and many grain elevator engineers and builders considered reconstruction with great sincerity, and for a long time there was a question of doubt regarding the remodeling of the plant to meet the necessary requirements of safe building construction.

The Burrell Engineering & Construction Company, with its motto of "No Job Is Too Small to Merit Our Careful Attention and None so Large as to Tax Our Capabilities," started construction work on this plant in the winter of 1919 and completed their contract in the summer of 1920.

The plant is now operating to a 100 per cent capacity and efficiency, and is considered as one of the largest and fastest elevators in that part of the country.

Another Cause of Dust Explosions

Broken Extension Light Results in Dust Explosion in Buffalo Elevator—What the Explosion Showed
BY DAVID J. PRICE*

IN THE study of grain dust explosions and fires, a number of new causes have been established in the investigational work carried on by the United States Bureau of Chemistry. One of the recent causes developed as a result of the investigations of disastrous explosions in industrial plants, was the ignition of the dust by the breaking of incandescent electric lamps. This development has resulted in co-operative experimental work with the large lamp companies and the results of the tests together with recommendations for safety equipment will be published in a separate report in the near future.

This brief article gives a summary of a recent explosion in one of the largest grain elevators in Buffalo, caused by the introduction of an extension electric light into an elevator leg. Although the explosion assumed minor proportions owing to the

clean condition of the plant, the cause was very definitely established, and adds to the knowledge now available concerning the cause of these explosions.

The explosion occurred on May 26, 1920, about 11 A. M., in one of the large modern elevators in Buffalo with 4,500,000 bushels capacity. The explosion, which originated in one of the elevator legs, injured three men, two of whom suffered from slight burns, and one from a dislocated shoulder received when he was thrown by the force of the explosion over a nearby belt conveyor.

The elevator leg had just been put in operation and the workmen had been pushing the dust in the pit into the leg, using an extension light to enable them to see into the pit. Shortly afterward, when one of the officials raised the gate to allow the grain to flow into the leg, the explosion occurred.

The extension light evidently had been left hanging in the pit and the wheat flowing into the pit covered the light so that it was not observed

*Engineer in Charge, Grain Dust Explosion Investigations, Bureau of Chemistry, United States Department of Agriculture, Washington, D. C.

by the official when he opened the gate in the leg. The opening of this gate allowed the light to pass through with the grain in the pit into the leg, and the explosion followed due to electric sparks, either from the broken light or broken wire coming in contact with dust in suspension in the leg. Flame from the explosion propagated within a radius of 40 feet, and the limited explosion was attributed to the clean condition of the plant at the time.

The housing of the elevator leg was slightly bulged above the boot and at another point about 20 feet below the head of the leg. This leg passed through a well, 12x14 feet and 90 feet in height, and the steel housing reached only from the boot to the bottom of this well, and from the top of the well to the head of the leg, leaving the leg practically open where it passed through the well.

This well was covered by the concrete floor with a small opening in it covered by a cast iron cover, similar to the bin covers in use in the elevator. The head of the leg was also vented through the roof, directly over the front of the leg. This arrangement of the leg, which allowed so much space for venting or relief of pressure created by the explosion, is probably one of the principal reasons why the explosion was not more disastrous. The extension light that entered the leg was protected by a wire guard, but under the circumstances, it afforded no protection to the light.

The office of the plant, situated near the elevator, was shaken by the force of the explosion. Some of the employees stated that immediately after the explosion they heard a rumbling noise that led them to believe another explosion was going to follow and they tried to escape from the building. The flames, as already stated, did not propagate, owing to lack of dust to feed the flame, and when the fire department arrived there were no signs of fire. After the explosion the leg was found to be out of alignment and the belt rubbing at the head of the leg. Evidently this had been caused by the force of the explosion.

This observation is important in view of previous developments that have established that the rubbing of a belt at the head of a leg will cause sufficient heat to develop and ignite dust in suspension. In this instance if the facts concerning the extension light were not known and it was later found that the belt was rubbing at the head of the leg, it might have been incorrectly concluded that friction due to this rubbing was the cause of the explosion.

This explosion has developed two very important propositions. The first is that the use of electrical extension lights in this manner must be classified as bad practice and should be discontinued not alone by workmen but by officials as well. The second is that the clean condition of the elevator prevented the explosion from assuming disastrous proportions. If the plant is well maintained and the dust effectively removed the explosion is confined to the primary or original stage.

The Bureau of Chemistry is endeavoring to establish definite causes of these explosions, and assist in developing safety practices to replace many of the common dangerous ones now in use. In the dust explosion work the officials and workmen have co-operated loyally when these new dangers have been called to their attention.

Although the work of the Bureau on this project will be curtailed during the present year owing to lack of funds, it will endeavor to investigate and study dust explosions that occur in the grain industry, and will be benefited by obtaining reports of these occurrences no matter how slight the damage done. The small explosion of minor proportions is as a rule of great value to the investigating engineers because it enables them to more definitely establish the cause. This has been well illustrated in the particular explosion referred to in this article.

THE Rev. W. P. Leek of Fond du Lac, Wis., recently had a shock. While attending a conference at Green Bay, he was called to the office of Alfred Debroux who owns a string of elevators. "Mr. Leek," Mr. Debroux said, "just 16 years ago you married

me. I want to say you did a good job. I was poor then and only able to pay you \$5. Here's the balance." It was a \$20 bill.

RUSSIAN GRAIN GROWERS IN CANADA

About 22 years ago a group of Russian immigrants from Vladivostok landed at Vancouver, British Columbia, to escape the persecution of Government and Church in Russia. These Doukhobors, as they called themselves, were a religious sect, basing their beliefs largely upon the teachings of

each and they immediately pooled the land and tilled more than the required percentage of the whole. But the Canadian Government had never had to do with a commune, so, as there was no precedent in the matter, they decided, as all governments do in similar circumstances, that the innovation was not legal, and after three years they dispossessed the Doukhobors of the land title, but allowed them 15 acres each to work.

Now the Doukhobors were the best agriculturists in Russia and they were hard workers, thrifty and prosperous. Probably that is one reason they were persecuted. But Russia's loss was Canada's



A DOUKHOBOR COMMUNITY FARM

Count Tolstoi. The sect is called the Christian Community of Universal Brotherhood. They were communists, in that they held all their property in common, and worked for the community without individual wages, the community providing their needs of food and clothing as they arose.

The Russian Government wanted the Doukhobors to do military service, which was against their religious beliefs; the Church, which, in old Russia, was but slightly below the Czar in power, wanted them to conform to the Greek Catholic

gain when they migrated, and the Saskatchewan colony at Verigin thrived. They had named their town after their revered leader, who later joined the colony. But there was not room enough for all and subsequently 10,000 acres of land were purchased in British Columbia.

The new colony worked on the communist principle, also, and they have one of the most prosperous neighborhoods in the Dominion. The illustrations show the station at Brilliant and the elevator successfully operated by the Brotherhood,



ELEVATOR AND DOUKHOBOR COMMUNITY HOUSE, BRILLIANT, B. C.

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Church, but they would not. So after years of persecution and hardship, during which their leader, Verigin, was sent to Siberia, they came to Canada.

They first settled in Saskatchewan in scattered groups on Government land, which they worked for three years without making any claim to title, for they did not know the laws of the new land and were not sure that they could acquire real estate without doing military service. Finally the Government informed them that each man could have 160 acres provided that a certain percentage was tilled.

About 2,000 of them received grants of 160 acres

and a section of the farm land with one of the community houses, built about a court and in which all live. The women take turns at doing the cooking for all, and in the mean time are busy in the dairy and at their spinning wheels and looms, while the men work in the fields and orchards, or in the general store, the canning factory or the grain elevator, all of which are operated on the communist plan. The settlement is practically self-sustaining, all the crafts are practiced with great skill, and the people are honest to a degree, industrious, shrewd traders and intelligent farmers. A large quantity of grain, all Doukhobor grain, passes through the elevator.

Trading in Grain Futures

Some of the Benefits and Objections to Future Trading and Proposed Rules for Improving the Practice

BY L. C. BREED

IT IS proper to state that this paper was prepared by the writer after having, by personal interviews and through correspondence, conferred with a number of the members of various grain exchanges. The position which the writer takes in regard to trading in grain for future delivery on margin is this: That the practice is a legitimate, logical and useful part of the marketing of grain, and that an exchange should provide facilities for such trading provided a majority of its members want to buy and sell grain for future delivery on margin. This, however, can only be practiced in localities where there is a constant market for cash grain of some considerable volume. The problem confronting the men who support this view is to find a way to eliminate acknowledged evils and to counteract, in so doing, the growing demand on the part of the public for legislation to prohibit this practice.

It is proper to realize it is doubtless a fact that more than is the case with any other country, the United States is given to speculating. This spirit is either active or latent in the breast of the business man and the newsboy. Therefore it is easily aroused and the number in the aggregate is so great that it is a factor to be reckoned with.

There is in our day, a very general disposition to bring about reforms and in some directions very drastic results have taken place as every one is aware. Public opinion is an irresistible force. Usually at the beginning, a movement toward bringing about a reform is like a mere cloud on the distant horizon and but little attention is given to it by busy people. Those persons who read the papers are aware that the exchanges are now to receive very marked and general attention on the part of the farmers, and the politicians who thrive on agitation have seized upon the very general dissatisfaction which they perceive is felt by the agriculturalists on account of the severe decline in the value of farm products, particularly in case of grain, as a means to acquire notoriety. The press which caters to this element of the population seeks to arouse public sentiment against the exchanges, and it is very likely that the grain trade will be put on the defensive in the near future. When the man who controls a chain of newspapers elects to take this matter up, as he probably will do, the fight will be of sufficient importance to warrant uneasiness among most if not all their members. It therefore is the part of wisdom to clean house and eliminate whatever can be brought up as incompatible with the public welfare.

Broadly speaking, it may be said that in case of the actual holders of grain, be they farmers, elevator proprietors or wholesale and retail dealers, the holding or the selling of grain is a matter of judgment—action either way is based on opinion as to the future course of the market. Many farmers and most of the elevator and grain men practice hedging against holdings. They seek to eliminate the risk incident to holding grain. On their part this action is equally legitimate with taking out fire insurance. Experiments with the suppression of exchanges in other countries prove that the farmers were the chief sufferers, and laws affecting them had to be repealed.

HEDGING IS INSURANCE

The practice of hedging admits of co-operation on the part of bankers, since, in effect, it is a cash transaction to each handler in turn; that is, each handler receives a credit based on his drafts. Advances are made to farmers, procured from local banks and grain dealers or buyers representing elevators or millers. It should, however, be borne in mind that in any of the large exchanges the sale of grain by concerns who are hedging, and later their buying futures to close out their trades, is only a comparatively small part of the transactions. Millers contribute business on their part by transac-

tions in the option market in connection with the purchase of grain and the sale of flour. Exporters have their use for deals in the market for futures and the next class to be mentioned is made up of men who use their time, brains and money in speculation solely—it is their business year in and out. Part of their business, in some cases, is merely that of a broker. We have now to consider the last class which is made up of men who can only operate in a small way for themselves or in a somewhat larger way for outsiders who can furnish the requisite margin money to protect their deals. The volume of business secured from the public varies from next to nothing to extremely large proportions, as already mentioned.

NEW RULES PROPOSED

We have now reached the constructive phase of this matter and the writer subjoins three rules for consideration in the hope that one or the other will, in the main, be found to be desirable and practicable of operation, with a view to remedying some of the objections raised against the exchanges. It may, however, turn out that some one else can better the means now proposed for the regulation of trading in grain for future delivery:

Rule No. 1

Require a person, in order to trade in grain for future delivery on margin, to become a member of some grain exchange unless he is a dealer in grain, miller, or a farmer.

Rule No. 2

Require all persons but farmers, grain dealers and millers to register in some existing exchange if they wish to trade in grain for future delivery. The secretary to keep a record of all trades, giving name of principal and agent, same to be open for inspection. The secretary to allow inspection of the clearing records in order that all open trades may be known to members of the exchange for the purpose of preventing the manipulation of prices.

Rule No. 3

Restore the wartime rule limiting future trading to 200,000 bushels for each individual or firm.

Objection has been raised against the second rule on the ground that it might be physically, so to speak, impracticable to keep a record of the trades made on busy days in case of the large exchanges. The fact, however, that the large exchanges have clearing houses through which all option trades pass, would, it is claimed, render it feasible to post the long and short interests of each member of the clearing house daily, and then have provisions made in the by-laws authorizing the board of directors to demand the names of customers, with the amounts long or short, at any time such information may be called for.

It would not, possibly, be necessary to have this information required except during the current trading month, thus giving every one notice on the first of the month of the amount of open interest, with the result that members could have the entire data in which to adjust their trades.

OPPOSITION MAY BE EXPECTED

All exchanges have rules by which to control the transaction of the business which is carried on upon their floors. Changes in methods of trading are effected by the adoption of new rules or the modification of old ones. It is very generally admitted that the transactions known as trading in futures are excessive and that means should be taken to bring about a reduction in volume. This can be done by the introduction and passage of a rule or rules which aim to effect this result. Some men say this cannot be done. What they mean is that a majority of the members of any exchange where trading in grain for future delivery is carried on, would not vote to restrict it, for the reason it would cut down their business. This is true, but on the other hand, it is possible, and some claim it is probable, that it may be prohibited by legislation.

There are some men who claim that under the

existing practice, what they term an open market prevails, and in consequence, fluctuations are not as wide as might obtain if the number of persons eligible to trading privileges was reduced very materially. As a corollary, they also claim that manipulation of the market is rendered more difficult than otherwise would be the case.

In contravention of the contention just referred to, the writer offers the following argument: Take, for example, a year in which, when harvesting of wheat is going on and an investigation is being conducted by the Government, and by private initiative, it develops that there is a short crop. The news of this is at once spread by the press and generally in an exaggerated way. Later on they give out a very strong pessimistic statement. There are some persons who sit up and take notice of this and put in their orders. Still more alarming reports are published and the so-called "public" begins to operate. The number of persons very rapidly increases until thousands of men, and some women, are engaged in playing the market. Of course somebody has to sell each man who buys, but as a general thing the sellers are seasoned operators and the number of them compared with the buyers is small. Among the sellers will be elevator men and farmers. The markets after a while become top-heavy, or over-sold. A decline sets in, and the public becomes uneasy. Many persons sell, some because they cannot protect their trades. The decline keeps on and then the public falls over itself to get from under. The public rarely if ever takes the short side of the market. This is the reason for the abnormal condition which in some years obtains in the market. Again, it is in wheat that it usually speculates. A shortage in the staff of life, duly promulgated by the press, has more appeal than a scarcity of corn or oats.

MANIPULATION

Manipulation of the market is practised and it is the aim of the better element among grain men to curb it. There is a difference of opinion respecting the method of doing this. Granted that the majority of the members of an exchange wish this to be brought about, they are obliged to consider what it is, one might say, physically possible to accomplish. Again, the steps to bring about restriction in manipulation ought to be adopted in all the markets where dealing in futures is practised.

The trade is familiar with its old friend—the law of supply and demand. Manipulation, however, can come very near to making water run up hill! The writer remembers that in St. Louis several years ago, west coast wheat was brought in large quantities to that market, and though it was not well adapted for St. Louis flouring purposes, unless mixed with No. 2 Red Winter, the rule was stretched sufficiently to admit it to grade contract wheat. Some considerable quantity of it reached Chicago. At other times wheat has been shipped to Chicago from eastern markets—brought back there even from Buffalo. It were well if the pikers who want to speculate in wheat should know that some of the concerns in the grain business, engaged in it either as speculators or merchants, or having both branches, are in possession of the last word in statistical information, the most reliable part of which they obtain on their own hook. The volume of business that they do warrants the cost of it. Furthermore they know their business. All the same they are aware of the element of risk—none know this more thoroughly.

In his book on "Speculation and the Chicago Board of Trade," James E. Doyle states that on August 25, 1919, there were 2,595 persons living in over half of the states in the Union who executed trades on the Chicago Board of Trade. There were persons acting as principals, trading either directly or through agents on the floor of that Exchange. Of this number, 1,083 were buyers or sellers of cash grain; 36 were buyers or sellers of "to arrive" grain; 1,476 were buying or selling future contracts. If to this number of so-called operators or dealers in grain, cognizance is had

of other markets—Kansas City, St. Louis, Minneapolis, Detroit, Toledo, Buffalo, and New York City, it will be seen that the number of them is very large.

If every person who handled cash grain were willing to take his legitimate profit for handling and hedged the speculative interest in the grain, there not only would be protection afforded, but the risk of ownership would be quite widely spread. It is claimed, however, that the majority of small dealers, and millers also whose mills are of small capacity, and others, do not hedge their risk in their holdings of grain. For this reason it is argued that speculation on the part of the general public operates to help to furnish the volume of business which it is claimed is necessary to prevent undue range of prices in the market. The writer, however, needs to be shown that the general public is ever, to any considerable extent, interested in a featureless market—i. e., when normal conditions prevail.

The action of the Chicago Board of Trade, taken after the last Patten corner, in passing rules, increasing the number of grades deliverable, making track grain deliverable, forbidding the sale of Chicago grain on other markets at less than the Chicago price, etc., is to be commended, since they were aimed at making of corners impossible, and in this course much additional effect was gained through similar action having been taken in almost all the other markets.

WIDE VARIATION IN CORN KERNELS

Equally good varieties of corn, both from the farming and commercial standpoint, may have kernels widely different in size and shape. The variations are graphically shown in the accompanying illustration, which is taken from a recent Farmers Bulletin of the Department of Agriculture. These kernels, which are actual size, are all healthy, and



ACTUAL SIZE OF KERNELS OF VARIOUS VARIETIES OF CORN

of average size for the variety they represent. The two kernels at the left in the upper row are Pearl pop corn; next are two of Stowell's Evergreen, two of Country Gentleman and two of Black Mexican sweet corn. In the next row are two yellow and two white kernels of Cuzco corn from Peru. The last two, and those in the two lower rows are kernels from standard varieties in use in the corn belt.

THE Dominion Government Grain Elevator, at Calgary, Alta., has broken all previous records this year for seed supplies and commercial shipments. Approximately 1,500,000 bushels of seed grain have been handled since fall and 20,000,000 bushels of

wheat, oats and barley for commercial purposes. This represents an increase over 1919 of 66 per cent for seed and 30 per cent for other purposes.

CALIFORNIA BARLEY

BY CHARLES W. GEIGER

What might be termed "sensational" crops are being harvested this year from the Holland Land Company's wonderfully productive tract at Clarksburg, near Sacramento, Calif. The company announced in August that barley was going as high as 50 sacks an acre.

Now the results show as high as 60 sacks an acre,



PILING BARLEY ON A SACRAMENTO RIVER BARGE

one of the biggest yields ever known even in the rich river sediment soil. This great production is due not only to the richness of the land but to the fact that the soil has the right moisture.

Acreage sown to barley this year shows a very substantial increase over that of last season. In the grain-growing industry of California during the past few years it has been a case of robbing Peter

over the world, the best, the lightest colored, and—whisper it—the easiest drinking beer, is made from California barley malt. England for many years has depended upon that state for malting barley to make its higher grades of beer. California barley is known wherever there are breweries.

India, Morocco, Smyrna, Tripoli, and Palestine Agaza all grow barley, and the North African countries produce, in small quantities, very good barley indeed, but nowhere on earth is the same volume of high grade white barley produced as in California.

The barley crop of the United States this year is estimated at 4,000,000 tons. Of this amount, ac-

cording to the Bureau of Crop Estimates, California's share will be 29,425,000 bushels, or roughly 740,000 tons. Had there been seasonable rains during the spring months the crop easily would have been a record breaker, for it is estimated that this season nearly 2,000,000 acres were planted to barley.

The cause of the extended planting was partly due to the light rains earlier in the year, which made barley the safest crop to plant, requiring as it does less moisture than other cereals. Large areas formerly planted to beans were also planted to barley, owing to a sharp slump in the market for beans following the war. Uncertainty regarding the price of wheat as a result of the termination of the United States Grain Corporation resulted in the planting of acreage to barley that had been usually devoted to wheat. Despite the poor growing conditions, therefore, the crop will be one of the largest ever harvested in the state, though 1914 holds the record with a 900,000-ton crop.

Barley grain is one of the staple stock feeds of the state under normal conditions, many hog raisers preferring this grain to corn for fattening purposes. It is also used to considerable extent in mixing with poultry feeds.

Stanislaus is this year the banner barley producing county of the state, with a yield of approximately 120,000 tons. Down in Tulare on one 5,000 acre ranch the crop runs between 55 and 60 sacks to the acre. In the Delta district and in some parts of the Sacramento Valley a yield of 50 to 60 sacks per acre is not unusual. Barley is generally grown throughout the state, but the bulk of the crop comes from the San Joaquin and Sacramento Valley lands.

AN AGRICULTURAL DISCOVERY

Apparently a way has been discovered by which Mother Earth can be hoodwinked into giving two crops even as far north as Illinois. It is announced by H. H. Parke, assistant director of the Illinois State Department of Agriculture, that by sowing a recently developed species of sweet clover, mixed with small grain, two distinct crops may be harvested from one seeding. The nitrogen taken from the soil by the grain is restored by the clover; and during the harvesting of the grain, the clover is not sufficiently advanced to be injured. The clover is harvested later and the soil is ready for corn the following year. A year is saved in the time necessary for the replacement of nitrogen.

A Feed Mill Founded on Science

The Great Plant of Chapin & Co. Has Extensive Equipment for Turning Out High Class Feeds

IT IS a long journey in accuracy and efficiency from the floor of a farmer's barn where he mixes his coarse grains in proportions he thinks would be about right, to the manufacturing plant of Chapin & Co. at Hammond, Ind., where cattle, hog, and general stock feeds are made by a process which insures uniform products at all times.

Feeding livestock can be done in two ways, right and wrong. The right way is the one which pro-

duces the greatest gains for the least money, or in the case of dairy cows, the greatest milk production. The wrong way of feeding is to be satisfied with anything but the best.

The mixed feed industry has made its place and is rapidly growing in power because, against strong prejudice and custom it has proved its value to the feeding world. It has been a hard fight, but

president of the company, and who is also president of the American Feed Manufacturers Association, is one of the best posted men in the country on the principles of scientific feeding, and the mammoth plant at Hammond carries out these principles in the scientific feed mixtures made.

The principal feeds made in the plant are "Uncorn Dairy Ration"; "Triangle," "Lactola," and "Acorn Dairy Feed"; "Centaur Feed" for cattle

and horses; and "Bicorn Hog Feed." All of the feeds are balanced, concentrated rations and do not contain roughages or cheap fillers of any kind. Some of the ingredients used are cottonseed meal, linseed meal, corn gluten meal, corn gluten feed, corn oil meal, brewers grains, wheat bran, hominy meal, yeast grains, cocoanut meal, ivory nut meal, barley meal, ground oats, molasses, wheat mid-

of concrete are 260 feet long and 80 feet wide; two of brick construction are 140 and 120 feet long respectively and 80 feet wide; and another brick house is 266 feet long and 81 feet wide. A corrugated steel warehouse is 265 feet long and 81 feet 6 inches wide. Two of these warehouses are equipped with electric trucks and two with automatic conveyors for sacks which can discharge into



FEED MILL OF CHAPIN & CO., AT HAMMOND, IND.



WAREHOUSE WITH COTTON SEED MEAL CAKE



VIEW OF THE MIXING HOUSE

in the comparatively few years since the industry started the worst enemies, ignorance and habit, have been routed, and only prejudice remains to be vanquished.

A trip through a plant like that of Chapin & Co. will convince the most skeptical that feeding is something more than filling the belly of livestock. Few farmers can appreciate the time and study that has been put into determining the requirements of each kind of stock, the digestibility of certain mixtures, and the manner in which the various ingredients should be combined. R. W. Chapin,

dlings, Kaffir meal, bone meal, gluten feed, and tankage. These are all high grade feedingstuffs and are mixed in proportions known to be best for each particular purpose.

The plant covers an area of about 14½ acres on the Indiana Harbor Belt Railway, with four tracks inside the company's ground, with a capacity of 80 cars. The buildings are extensive and consist of an elevator, six warehouses, grinding plant, crushing plant, mixing plant, boiler house, two bag houses, machine shop, office building, and garage. The elevator is 103 feet 6 inches by 45 feet 6

36 car door openings in the warehouse. The sacks of feed have to be handled by hand only inside the car. There are three portable sack pilers, one large which can reach to the top of any of the warehouses, and two smaller ones.

The stationary sack conveyors in the warehouses are 280 feet, the length of the warehouse, with a cross conveyor 60 feet long. Another rubber belt conveyor 150 feet long transfers the sacked feed from the mixing house to the loading conveyor or to the warehouse floor.

The grinding plant is about 33 feet square, three

stories high, and of frame and steel construction. There are two Bauer Crushers for handling cotton seed and linseed cake and corn oil cake, and two 36-inch Bauer Attrition mills one with a 50-horsepower attached motor, and the other with similar attachment of 40-horsepower. There is also an Invincible Magnetic Separator and a crimping roll for oats. Every commodity used in any of the feeds can be ground here. Not all of it is, for Chapin & Co. buy much ground material when the market is right.

The mixing plant is in two units, one devoted exclusively to "Unicorn Feed," and the second to the other brands. In the Unicorn unit there are 22 Draver Feeders with a mixing capacity of 50 tons an hour. In the other unit there are 18 Draver Feeders and on a mezzanine floor are the molasses feeders. The mixing conveyors are all of the worm or spiral type; in fact all of the bulk conveyors in the entire plant are of this type. The molasses feed is discharged from the conveyor to a blower by which it is elevated and cured at the same time, the force of the air separating the feed so that it doesn't roll up into dough balls.

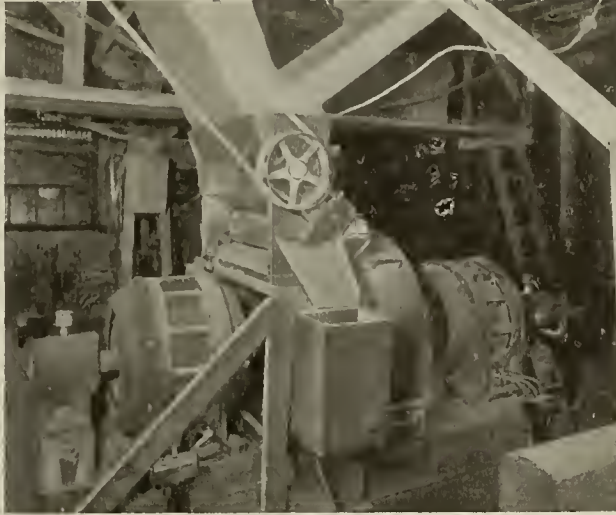
The feed is sacked through automatic scales, there being seven in one unit and four in another. The sacks are closed on Union Special Sack Sewing Machines. The filled sacks are dropped from the packers to a moving sidewalk which extends the length of the building. From this they are conveyed to cars or warehouse at will.

There is a complete dust collecting system, a suction being installed in every bin and feeder in the place.

Power is entirely electric, derived from a substation of the city power company, right next to the transformer house. This latter is a brick building which contains the transformer and the lightning arrester. There is a charging plant for the electric trucks, the magnetic separator and for the clock and telephone system. The primary switchboard is in this house while a secondary switchboard is next to the superintendent's office. From this latter board the operations of the entire plant can be controlled. There are seven motors,

might need, and has turned out a great amount of new work also. For instance, most of the sack conveyors were made on the premises. Much of the regular conveying machines and mixers were made by the Skillin & Richards Manufacturing Company, now a part of the Webster organization.

The office building is a two-story brick structure near the entrance to the grounds. The second floor is the office proper, well equipped in every particular and with a telephone switchboard with



ONE OF THE BAUER ATTRITION MILLS

direct connection to every part of the plant as well as to the general offices in the Webster Building in Chicago.

On the first floor of the office building is the printing plant, where all the circular matter, letterheads, and advertising literature is printed, a great deal of multiple color work being done. This material is sent to all handlers of Chapin's feeds, and a great amount of circularizing is done for customers direct from this office. Every possible effort is made to work with the customer in getting his goods to the consumers, and the printing plant is kept busy all of the time.

The feed plant is under the management of George M. Chapin, brother of President R. W.

ing standard: To make as good feed as it is possible to turn out. He has built his business and his reputation on a firm foundation of scientific knowledge which has led to the high places in the feed world.

THE INJUSTICE OF PRESENT DEMURRAGE

High demurrage charges during the war were submitted to with little protest, as everyone realized the importance of releasing cars as quickly as possible on account of the enormous tonnage that had to be handled. But in peace time such unreasonable charges cannot be defended. The matter was recently brought to the attention of the Interstate Commerce Commission by the Holt Milling Company of Nashville, Tenn., in a forceful letter, part of which was as follows:

In order to show you just what this storage figures, we have made a few calculations; and while they are not accurate to the cent, they are sufficiently so to use as illustrations.

Flour at \$8.90 per barrel can remain in storage just five months before the storage charges equal the entire cost of the flour, which you will see is 20 per cent per month or 240 per cent per year. Flour at \$11 per barrel can remain six months and five days when the storage will equal the cost. This figures about 16 per cent per month or 192 per cent per year. Flour at \$8.90 per barrel for five months at the rate of 6 per cent equals 22 cents; at 7 per cent the interest would amount to 26 cents and at 8 per cent the interest would amount to 30 cents per barrel. Flour at \$11 per barrel for six months and five days at 6 per cent equals 34 cents per barrel; at 7 per cent, 38 cents per barrel; and at 8 per cent, 45 cents per barrel. So, compare the interest charges, which are permitted under law by the different states, in comparison with the storage charges, inaugurated by your Commission, and you will see a vast difference.

Then after giving an actual instance of a shipment of flour on which demurrage charges were assessed to the amount of 12 per cent per month on the value of the flour, the letter continues:

The law-making bodies of several states have practically put pawnbrokers out of existence because of the unreasonable interest charges which they demanded. Yet the ordinary pawnbroker was glad to make loans at not in excess of 10 per cent per month, or 120 per cent per annum. Yet, under the Uniform



MIXING MANY PRODUCTS INTO FEEDS



PACKING UNICORN FEED, WITH MOVING SIDEWALK SHOWN AT RIGHT

in addition to those direct connected on the attrition mills, ranging from 20 to 40 horsepower. The transmission is by Morse Silent Chain Drives in all cases but to the elevator head shaft which has a rope drive from a shaft close to the motor on the main floor. The motors are kept clean at all times with a portable pneumatic cleaner which has air under compression. This blows out every bit of dust instantly.

The plant is heated from the boiler plant. In this room is the largest of the molasses tanks, which with two smaller tanks outside, holds about 130 tons.

The machine shop is a brick structure 68 feet long by 31 wide. It is two stories in height and is equipped to do any repair work which the plant

Chapin. He superintended the building of practically the entire plant, as it has been enlarged from time to time to take care of the increase in business, and is conversant with every detail of its construction and operation.

The mill superintendent is H. H. Goff, who was formerly with the Douglas Starch Company at Cedar Rapids. Although he has been with Chapin & Co. but a short time, he has already substantiated his reputation as being one of the foremost feed millers in the country.

Over it all, however, is the presiding genius of R. W. Chapin who has guided the destinies of the company since its establishment as a feed manufacturing business over 25 years ago. In good times and bad he has kept before him one unflin-

Storage Tariff of August 30, 1920, the railroads in any state can charge as much as 20 per cent per month, or just twice as much as the maximum charges which caused pawnbroking to be declared illegal; yet the pawnbroker would actually advance money on collateral but the railroads hold collateral and advance no service other than that of warehouseman. The present storage rates were not intended as a source of revenue to the railroads, but were made as an extraordinary penalty to facilitate quick handling of merchandise and keep open the channels of trade during the urgency and necessity created by the World War. But since the War is over, this storage tariff becomes a tremendous revenue to the railroads, and it is unreasonable to suppose that they will change it until they are forced to do so by the Commission who gave them the right to charge it.

We are sure that you can see the injustice of permitting the present rates to continue and we hope to have some relief at your hands.



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers National Association and of the Illinois Grain Dealers Association

CHICAGO, ILL., DECEMBER 15, 1920

NATIONAL FINANCING

A FOREIGN Trade Financing Corporation was organized in Chicago on December 10. The corporation will have a capital of \$100,000,000, and under the authority of the Edge Act, will issue \$1,000,000,000 in trade debentures to aid in financing export of American products. An executive committee of eight will choose the officers, and Julius H. Barnes is said to be slated for the position.

In the meeting at which this new corporation was organized, full recognition was given to the difficulty under which farmers are operating, and the best financial minds in the country agreed that creating an outlet for our products would be far more effective in establishing a fair price level than by trying to finance the farmers, as a class, from within.

The formation of this corporation will put a quietus on most of the bills introduced in Congress to help the farmers hold their crops for higher prices. There are few farmers who would not now be satisfied with \$2.50, Chicago, for their wheat. Every one of them could have obtained this when his crop was harvested if he had hedged it on the open market, but he would neither hedge nor sell because he wanted to speculate by holding his grain for a rise. We have little sympathy for any one who deliberately speculates and loses.

The livestock producer is in a different case. He could not hedge his products and is an involuntary speculator. He has to assume the entire risk on his stock over a long

THE AMERICAN ELEVATOR AND GRAIN TRADE

period, and now, with lower prices and credit facilities unequal to the strain, he will have to be given further aid or create a serious situation in our future meat supply by selling immature stock to meet his obligations. His case should have immediate consideration by Congress, irrespective of the effect on other bills which the Foreign Trade Financing Corporation will have.

HELP YOURSELF

CONGRESS has before it a multitude of bills to help the farmer market what remains of the present crop, without entailing so much loss. There are bills to put duty on grain from 15 to 35 cents a bushel; there are bills to prevent the importation of farm products, including meat, altogether; there are bills to restore the War Finance Corporation to aid farmers; bills directing the Federal Reserve Board to extend them credit; and bills directing the Federal Land Bank to use \$100,000,000 to rediscount farmers' paper, particularly live stock paper.

All of these bills put together, if passed, would not have as much effect toward raising prices, as would a concerted movement to buy a barrel of flour. If every farmer should buy a barrel of flour now, he would see wheat go shooting skyward, carrying with it the other farm products.

The American people seem obsessed with the idea that the business of the world can be regulated by legislation. It never has been and never will be. Supply and demand determine prices, and if the farmers would join together in demanding the products of their own wheat they would help their cause more than Congress can. Create a demand for flour and we will soon find that we are not overburdened with a wheat supply. This will be reflected in the price.

TRADING IN FUTURES

FUTURE trading should need no defense among those who handle grain, and yet there are some millers and grain dealers who attribute the recent fall in cereal prices to this cause. Those who are freest in their criticism are those who did not take advantage of the futures market, but preferred to speculate in cash grain, and lost. While the Southwestern Millers Club condemned future trading and a number of Kansas grain dealers stood with them, the vast majority of grain handlers realize that their only protection from the hazards of speculation is in hedging. Thus the Ohio Millers State Association at its recent meeting declared that: "Whereas, the futures market affords the only opportunity of protection to the miller, be it resolved: That the Ohio Millers State Association go on record as favoring a continuance of its operation as long as it functions properly and fulfills the use for which it was created."

This leads to quite another proposition. There are many men who believe in future trading who also believe that the system under which it is operated can be improved. L. C. Breed is one of these, and has contributed an article for this issue under the title,

Thirty-Ninth Year

"Trading in Grain Futures." He proposes three rules which might improve the system. We suspect that these tentative rules are less a matter of conviction than to provoke discussion, and we share his hope that this will be freely indulged in.

Already Congress has been besieged with bills which, if passed, would put the grain exchanges out of business. Senator Capper's proposal of a 10 per cent tax would surely do so. He might as well propose to abolish them altogether. Farm organizations have passed ill advised resolutions to this end, and the newspapers, particularly the country papers, have discussed the subject endlessly, and usually ignorantly. In short, the subject is before the whole country. If the system can be improved the grain exchanges would be the first to welcome a practical suggestion.

Many of our readers, no doubt, have opinions on the subject and a full, intelligent discussion at this time will be prolific of real good. We hope that a large number will contribute their ideas.

THE 24-INCH RULE

IN SPITE of protests by the grain trade, the Interstate Commerce Commission in its new order on minimum rates, effective January 1, 1921, in Note 2, says: "Actual weight will apply in the following cases: (a) When grain is loaded at point of origin to within 24 inches of roof, at side walls of car, for the purpose of Federal, state or official grain exchange inspection. Etc."

A great many dealers have testified that they get unsatisfactory results when grain is loaded less than 36 inches from the roof. In many cases, no doubt, lazy samplers (or perhaps they are too fat) have been responsible for the dissatisfaction. It is easier to write: "Too full for proper inspection," than it is to crawl into a 24-inch space and wield a sampler effectively.

When the new rule goes into effect, one of two things will have to be done: Shippers will have to level the car before shipment; or samplers will have to get busy. Perhaps the outcome will be a weight limit on samplers, none but a perfect 36 need apply.

CO-OPERATING ON THE TERMINAL MARKETS

ONE of the questions which will have to be decided once and for all in the near future is this: Shall the grain exchanges admit co-operative companies which prorate dividends on the patronage basis? The farmers' co-operative companies believe that they should. The rules of the grain exchanges forbid it.

These rules were not aimed at the co-operative associations. They were adopted before such associations were more than isolated, local affairs. The rules aimed to protect the small broker and commission merchant against the stronger firms with small scruples. Twenty-five or thirty years ago the giving of rebates to big customers was a common practice. The railroads and express companies all did it to favored ship-

pers, and you remember with what disastrous effect; wholesale merchants did it, and thought nothing of it. Board of Trade members did it. It was a part of the wasteful and unfair system prevalent at the time; it was a means of getting business from large customers at the expense of the small. One of the first acts of the Interstate Commerce Commission when it was organized was to abolish the practice, so far as the railroads and express companies were concerned, and the grain exchanges followed suit, the Chicago Board of Trade by adopting the following rules:

Sec. 9. B. In no case shall the aggregate amount of brokerage allowed on any transaction be such that the net commission to members on such transaction shall be less than the minimum rates prescribed in Paragraph H, Section 9, of this rule, for clearing trades for members.

C. Members cannot abate or divide with other members the rates prescribed in Paragraph H, Section 4 of this rule, for clearing.

F. Any member who, or whose firm or corporation, shall be convicted by the Board of Directors of a violation of the provisions of this rule, or of any evasion thereof by making rebates in prices, by making any contract or observing any contract already made, by furnishing a membership in this Exchange, by giving any bonus, gift, donation or otherwise, or shall purchase or offer to purchase any grain, seeds, provisions or other commodities consigned to him, them, or it, for sale, or by rendering any other service or concession whatsoever, with the intent to evade in any way directly or indirectly the regular rates of commission or brokerage established by this rule, shall be expelled from this Association. Free telegraphic communication, however, shall not be construed as a violation of this rule.

Obviously a prorated patronage dividend would fall under this rule. There are, then, two courses open: To abolish the rule; or to make exception of co-operative companies.

If the rule were abolished the unfair competitive practices of a generation ago would again prevail. No shipper, co-operative or independent, would want to feel that he might be discriminated against. The idea is unthinkable. There remains the other alternative: Make an exception in favor of the co-operatives. Would they care to come in on that basis? We believe they would prefer to stand on their own bottom, meeting the market competition on a basis of equality, asking no favors and without fear.

THIS DOESN'T HELP

PUBLIC confidence in or sympathy with the farmers' cause cannot be secured when its representatives indulge in the wild statements that Benjamin Marsh, director of legislation of the Farmers National Council, made before the Chicago Federation of Labor on December 4. "The criminal conspiracy to drive down the prices of farm products is made possible by the fact that the railroads were returned to the stock gamblers of Wall Street and that the Federal Reserve system now is controlled by the big predatory financial interests," declared the farmers' representative.

Government operation of the railroads is the aim of the trade unions, led by the railroad brotherhoods who would be the only ones to benefit. It is not endorsed by farm-

ers generally, and Mr. Marsh as their spokesman had no authority to imply it, for every reasonable farmer knows that the return of the roads to private ownership had nothing to do with the fall in prices of farm products.

The operations of the Federal Reserve Bank, on the other hand, had considerable to do with it, but these operations were not directed against farmers primarily, but against speculators who were holding large stocks of merchandise for higher prices. These speculators were hit harder than the farmers were and the movement had general sympathy from the public, including the farmers, when it started. It is unfortunate that the timidity of buyers which was instilled then, should have been reflected back to the farms, but deflation had to come and it was inevitable that farmers should suffer with every one else who had a commodity to sell. These operations are so well known that Mr. Marsh only discredits his organization when he raves as he did.

EDITORIAL MENTION

A Merry Christmas—and may your new year be free from Government interference with business.

France produced 232,729,480 bushels of wheat this year, about 50,000,000 less than Canada. Much of the acreage was in the war area, and the performance is remarkable under the circumstances.

Car movement continues to keep well ahead of the corresponding month of the last two years. Due to seasonal causes it is below the high mark of the year. There is a marked decline in grain and livestock shipments.

The business world generally has been pretty much demoralized by the cancellation of contracts. Never before has the grain trade felt so keenly the benefit of its arbitration committees which protect dealers from this evil from which almost every other trade is suffering.

If reports are true Australia has already sold 97,000,000 bushels of wheat for export, leaving only 3,000,000 of its estimated surplus. Broomhall says that 36,000,000 bushels were sold at \$1.54 to \$1.71 f. o. b. France. No wonder there is little demand in this country.

The plant disease survey recently concluded by the Department of Agriculture estimated losses this year of 112,000,000 bushels of wheat, 50,000,000 bushels of oats, 80,000,000 bushels of corn, and correspondingly large amounts of vegetables and fruit. The world evidently needs a General Gorgas of the vegetable kingdom.

Secretary Wells of the Western Grain Dealers Association has sent out two conspicuous cards to be posted in elevators of members. One quotes the Landlord Lien Law of Iowa, which declares a tenant guilty

of larceny if he, with intent to defraud, disposes of grain upon which there is a lien, without the landlord's consent. The other card is a notice that checks will be made payable to both landlord and tenant and must be endorsed by both. In this year of general liquidation and losses the moral hazard of purchasing grain from a tenant is greatly increased in some cases, and an enforcement of the latter rule will undoubtedly save trouble for many elevator operators.

Over 45,000,000 bushels of Canadian wheat were sent to this country this year up to December 3, which is more than 20 times the amount marketed in the same time last year. Since December it is estimated that over 5,000,000 bushels additional have been started down the lakes to Buffalo and Chicago. In spite of this flood of grain, Canadian exchange on New York is down to 86.50, which in itself nets a profit of 13½ per cent to the Canadian seller.

The Government report on Winter wheat acreage will not be issued until December 17. The report of P. S. Goodman of Clement, Curtis & Co., which is considered quite reliable, makes the condition of Winter wheat 90.5 as against 82.5 last year and 88 for the five-year average. The acreage is estimated at 37,612,000, compared with 38,770,000 a year ago and a five-year average of 42,260,000 acres. The probable crop, allowing for a 5 per cent loss in acreage, is placed at 585,000,000 bushels, against 532,000,000 this year.

Senator Capper of Kansas cannot understand how more grain can be sold in Chicago than is raised in the country. Will someone please tell the Senator that a bushel of wheat may be sold more than once, and that in a period of depression it is better that 10 men should lose five cents each on the decline than for one man to lose 50 cents. This is what has happened many times in the recent declines, during which many erstwhile bears became bulls only to be forced to sell at a loss when their support failed to stop the drop. There are few operators who have not been stung at some stage in the last three months. But professionals do not try to beat an adverse game, they take small losses and save their hides.

A. C. Townley of North Dakota fame is reported to have called in all his spellbinders from Minnesota and Dakota, purchased 40 Ford sedan cars, leased the entire floor of a hotel at Grand Island, Neb., for headquarters, and started a drive to deliver that state over to the Non-partisan League, which, by the way, is about the most partisan thing between oceans. After Nebraska is hog-tied and stripped, he will conduct intensive campaigns in other states. He thinks that dissatisfaction over prices will make his path easy in Nebraska. Perhaps that state may have heard of the tax increases and the bank failures in North Dakota under Non-partisan rule. No doubt Mr. Townley can explain them away as being due to Wall Street or the Minneapolis Chamber of Commerce.

A. E. REYNOLDS
Crawfordsville

NEWS OF THE TERMINAL MARKETS

LESLIE F. GATES
Chicago

WOULD PROHIBIT BOARDS OF TRADE

E. E. Fritzell of Larned, Kan., a member of the Kansas State Board of Agriculture and newly elected state senator has made the announcement that a bill will be introduced at the next session of the legislature to prohibit the operation of boards of trade in the state. Outlining the provisions of the bill Mr. Fritzell said: "This law will make it a criminal offense for a person to sell a bushel of grain which he does not own. Such a law would prohibit speculation in grain and tend to stabilize the market to the advantage of both the producer and consumer. I believe that if Kansas could establish such a law other states would soon see the advantages of it and do likewise."

SUSPENSION OF PROPOSED INCREASED DEMURRAGE

The Interstate Commerce Commission and the Illinois Public Utilities Commission have suspended the operation of the proposed increased demurrage charges which the carriers had published to become effective December 1. The present demurrage charges are, after the expiration of the free time, \$2 for each of the first four days and \$5 for the fifth and each succeeding day; and the carriers proposed to increase these charges to \$3 for each of the first four days, \$6 for each of the next three days, and \$10 for each succeeding day. The Commission has suspended the operation of the proposed increased charges pending hearing and decision thereon.

AT INDIANAPOLIS

The Indianapolis market has been having fair receipts for the past week. Receipts of corn have been running from 50 to 100 cars and oats from 10 to 20 cars.

Both corn and oats selling right up to prices in other markets, the demand being good, and the market cleaned up each day, showing our market is in a good position to handle any grain coming this way.

Receipts of wheat have been extremely light, and we have been getting premiums on it. No. 2 and No. 3 Red wheat selling here f. o. b. country points at equal to the prices it is bringing in other markets on a delivered basis—*P. M. Gale Grain Company, Indianapolis, Ind. Letter of December 13.*

ONLY BEST GRADES WHEAT WANTED

The edge is off the cash wheat demand here with the exception of the very best grades. Upwards of a million bushels of wheat have been delivered on contracts in the last two or three days. Most of this wheat is 3DS and as it was cheaper for the mills to take this grade of wheat on delivery than to buy it on the open market at prices that were prevailing recently, naturally 3D wheat and lower grades have eased off considerably as compared with the futures. The movement from the country is very light, however, and should any demand for cash wheat spring up, it would undoubtedly stiffen our spot prices.

Relative to corn, this market has been at a premium over Eastern markets practically all fall. Yellow corn is selling here at 3 to 5 cents higher than Chicago spot prices, freight differences considered. Mixed and White corn, however, are now about in line with Chicago, consequently on a firm basis. Trading does not follow the fluctuations of the Chicago futures very closely.

The demand for oats has constantly slackened throughout the week. Oats that would bring 1 cent

under Minneapolis May the first of the week are now selling at 2 cents under. There is not a keen cash demand for oats here.—*Godfrey Grain Company, Minneapolis, Minn., Review for week ending December 13.*

NEW PRESIDENT OF OMAHA EXCHANGE

The Omaha Grain Exchange has chosen as its president for the next 12 months Charles H. Wright of the Nebraska-Iowa Grain Company. Mr. Wright entered the grain business in 1896 and has had a long and active connection with the trade at Omaha, being one of the charter members of the Exchange. He has acted as director of the exchange for three years, as treasurer for one year, and as vice-president for two years, and conse-



CHARLES H. WRIGHT

quently brings to his new office the cumulative experience gained in a number of years of service to his fellow members. He is assured of the support of a host of friends.

PRICE OF OATS TOO CHEAP

The market has closely followed the action of leading grains. Sentiment has been more friendly to the buying side and more attention is given to the conditions that have a direct influence on the course of values. Although the present statistical position is not encouraging to holders, we cannot overlook the fact that the price is far too cheap, as compared with other commodities. Receipts continue light and farmers are not offering their surplus oats and they are not likely to unless the price improves. This will strengthen the statistical position eventually, for the cash demand has improved and stocks are decreasing due to the better shipping demand.—*Simons, Day & Co., Chicago, Ill. From Weekly Market Review of December 11.*

FAVORABLE MARKET IN PEORIA

Receipts of corn have been running 30 to 40 cars per day for the past week, all of which has sold readily at prices that compare very favorably with other markets. Shippers have been the principal buyers. Local industries are buying a little corn, but they are finding a dull demand for their products, and so are running very light. The industrial demand, at the present time, is limited. With present receipts, we believe that offerings will be

absorbed readily here, but we do not think that the general corn market is in any shape to stand a large run of corn.

Oats receipts were very light early in the week, but have been increasing the last few days. The demand has been good to the extent of the offerings, the best demand coming from shippers who are working the oats to the South. We believe that the oats market is in much the same condition as the corn market, and that any large run will break prices.—*W. W. Dewey & Sons, Peoria, Ill. Review for week ending December 13.*

PORTLAND FAVORED BY RATE

On December 2 the Interstate Commerce Commission handed down its decision in the Columbian Basin rate case. The decision establishes a 90-cent rate for Portland as contrasted with \$1 haul to Seattle, Tacoma and Astoria.

Ratifies the contention that the Columbia River water grade is most economical haul.

Creates a differential in wheat rate, all other commodities corresponding, of 2 cents for each 100 pounds in favor of Portland.

Makes certain that many export grain shipments, as well as other export commodities, will roll down water grade to the sea via Portland, and ends decisively the discriminatory northwestern rates that have throttled the commercial development of Portland.

OATS AND CORN ON PRE-WAR LEVEL

Oats and corn prices are still on a pre-war level occasioned to some extent by the rather phenomenally open winter thus far. The feed demand is dull and terminal supplies being more than ample there is little or no stimulus for higher values.

In wheat on sharp advances there seems to be much uncertainty and a lack of faith in further advances. Reactions have been severe and no doubt it will take considerable time to restore public confidence. Measures that will be practical and a remedy to the present inability to finance distribution of supplies where needed, is the pressing problem, the solution of which will stabilize all business, and we have confidence that it will be worked out satisfactorily.—*Quinn-Shepherdson Company, Minneapolis, Minn. From Weekly Market Review of December 10.*

MAY CORN FOR INVESTMENT

For the December and early January period, wheat may have settled down to some steadiness at the 150 to 175 level. May wheat may start December 15 at about the March price. We cannot uncover any possible serious world scarcity prior to May or June, 1921. On world finance and the 1921 trade outlook we consider a price of beyond \$1.75 for Chicago wheat as decidedly unlikely.

On December 17 the Government will estimate the new winter wheat and rye crop conditions. On December 14 the Government will confirm its 1920 crop and acreage estimates. Our R. O. Cromwell estimates the new winter wheat condition at around 90 per cent with an acreage of around 36,000,000. Frankly—we believe the Canadian 1920 wheat crop total is in abeyance. At 293,000,000 Canada would hold a January 1, 1921, export surplus of 100,000,000. Thus on January 1—Australia, Argentina, the U. S. and Canada may hold 330,000,000 for export. Ample.

If May corn is to remain around 75 cents and March wheat \$1.60—then May oats at 50 cents are cheap. Hogs average below 10 cents and may de-

cline to 9. Private estimates of a hog population decrease of 8 per cent and cattle decrease of 6 per cent are offset by the business outlook. Corn harvesting slow and part of corn belt is holding corn on theory early 1921 will repeat 3 out of past four years and bring a big corn advance.

Our reports show that Nebraska is selling wheat. Also that part of the corn belt will sell corn. The large amount of Canadian wheat moving toward Chicago is taken as an indication of final very large deliveries on December contracts. Very large. Corn, oats and provisions are liberally liquidated. Lengthy corn declines are not indicated. Investment orders should be forwarded to meet the declivities.—E. W. Wagner & Co., Chicago. Late December market letter.

NEW TRAFFIC MANAGER AT CINCINNATI

The Board of Directors of the Cincinnati Grain and Hay Exchange have announced the appointment of B. J. Drummond, of Cleveland, Ohio, as



B. J. DRUMMOND

manager of the Traffic Department of the organization. Mr. Drummond began his railroad career with the Fremont, Elkhorn & Missouri Valley Railroad, now the western lines of the Chicago & Northwestern Railway, in the operating department. After being in the employ of the company several months he was transferred to the traffic department in Omaha, Neb., in 1897.

Leaving the Northwestern in 1899, Mr. Drummond became soliciting freight agent for the Erie Despatch and in 1901 was appointed general agent in the Northwest Missouri River territory, which position he held until the fall of 1907, when he was made manager of the consignment department of the Von Dorn Grain Company, exercising his individual membership on the Omaha Grain Exchange.

In 1909, Mr. Drummond took charge of the export and import division of the traffic department of the Cudahy Packing Company, and later assumed the managership of the freight claim department. Four years later he became chief tariff and rate clerk under the division freight agent in charge of the western division of the Illinois Central.

On January 1, 1916, Mr. Drummond became traffic manager of the Omaha Alfalfa Milling Company. While in this position he served one term as secretary and two terms as president of the Omaha Traffic Club. He also was chairman of the Advisory Committee of the Traffic Managers' Committee of the Omaha Chamber of Commerce.

In addition to those duties he was a member of the Transportation Committee and chairman of the Arbitration Committee of the Omaha Hay Ex-

change. He went to Cleveland, Ohio, in July, 1919, joining the forces of the American Ship Building Company, in charge of special traffic work. For the past year he has been an assistant to the comptroller and having charge of matters with relation to subsidiary contracts with the Emergency Fleet Corporation as well as the development of statistical features of ship construction.

The presence of a man of Mr. Drummond's ability in Cincinnati will no doubt bring about a clearer understanding and quick adjustment of traffic problems affecting Cincinnati grain and hay interests.

CHANGES IN MEMBERSHIP

Chicago.—New members on the Board of Trade are: Lawrence Strassburger, Alfred W. Coote, Jas. J. Sheeren, Jr., Arthur R. Stone, Walter C. Hardy, Julian G. Cates, and Gerald C. Cudahy. The memberships of the following have been transferred: Earl Oswald, Geo. F. Powell, W. H. Long, H. F. Bartling, E. C. Morrow, Frank Timm and Edw. C. Graff. Reported by Secretary John R. Mauff.

Duluth.—Joseph Simons was recently elected to membership on the Board of Trade. Reported by Secretary Chas. F. MacDonald.

Milwaukee.—Herman L. Berg, Terwilliger Company of Minneapolis and Willard M. Geering, of the Flanley Grain Company are new members in the Chamber of Commerce. E. G. Terwilliger and C. E. McDonald's memberships have been transferred. Reported by Secretary H. A. Plumb.

NEW DEPARTMENT OF BOSTON CHAMBER OF COMMERCE

With a view to inaugurating vigorous, systematic and continued work for the further development of the Port of Boston, a bureau has been organized in the Boston Chamber of Commerce. It will be known as the Maritime Association, and starts off with about 25 firms and agencies among its members which are more or less closely identified with the various activities which its name indicates—shippers, steamship and railroad agents, bankers, insurance men, forwarding agents, etc. Edward E. Blodgett is the chairman. This organization is proceeding to interest in its membership many more of the concerns who would likely be interested in the development of the port.

An expert manager, with a corps of assistants who will devote all their time to forwarding the work of the association will be secured as soon as possible, and the present Maritime Bureau will be absorbed in the new organization.

Among the needs of the port, as seen by the steamship men, is a larger volume of inbound miscellaneous freight, which if in continuous receipt, would work in to great advantage with bulk freight, such as now comprises the principal part of the offerings. How to bring this about is one of the problems which the new organization will undertake to solve.

REPORTS EXCELLENT DEMAND FOR YELLOW CORN

Local receipts for corn for the week, 660,000 bushels. A very good demand and higher prices were experienced early in the week, No. 4 Yellow corn bringing 70 cents f. o. b. shipping points, as against the top last Saturday of 66½. However, the pronounced weakness in Chicago had its effect yesterday and today, and the cash sales at the close tonight were practically unchanged from last Saturday, around 66 cents.

There has been an excellent demand here the entire past week for Yellow corn, and the White corn has been cleaned up at three to four cents' discount.

Indianapolis is receiving about as much corn as Chicago, our receipts today being 81 cars against 92 in Chicago, and prices in this market have ranged, we believe, from one to three cents above our competitors net to the shipper. No one can foresee the trend of the market, but unless the receipts become much larger, we anticipate an excellent demand for the balance of this month and no doubt beyond.

The oats market has been without feature now for some time, closely following the action of corn.

However, a good local demand has been in evidence all week in this market. Receipts have been small for the week, only 196,000 bushels, and on basis of f. o. b. shipping points, they sold at 48½ cents against delivered prices in other nearby markets of 49 to 50 cents for No. 2 White.

There are not nearly enough oats coming into Indianapolis. Until the arrivals increase, we believe that premiums will be paid for good oats in this market.

Receipts of wheat are practically nothing, only a car or two a day, and No. 3 Red wheat sold today on spot at \$2 basis shipping point. Although the demand is only fair, the supplies are not nearly enough, and every consigned car has several buyers. —Urmston Grain Company, Indianapolis, Ind., Weekly Review ending December 13.

GRAIN RECEIPTS LIGHT

The wheat market at the beginning of this week was very strong and the upward trend of the options was very strong also.

The predicted falling off in Canadian wheat was a strong influence, but toward the end of the week bearish financial news and reports that bankers were forcing the Southwest to sell, together with slow exporting demand influenced the market to a lower level.

Wheat seems to be in a strong position except for the economic condition of the country.

The corn movement is so small, the cash prices are rather strong. It looks like the only thing that can force corn prices in this market lower, will be heavier receipts.

The oats market has been strong throughout the entire week, although 1 cent to 2 cents lower now than at the beginning of the week.

All grain receipts are very light and it is hard to say when we will get a movement of any size at all.—Mutual Commission Company, Cincinnati, Ohio, Review for week ending December 13.

THE UNFORGETTABLE TINY TIM

It was certainly Tiny Tim in Dickens' Christmas Carol who said, "God bless us, every one." Evidently Tiny was feeling pretty good about that time, having in fact the time of his life, and good times had been very scarce up to that period in his ex-



FRANK I. KING? WELL, GOD BLESS US!

istence. Tiny probably felt as the news boys, business girls and invalids are going to feel when the Christmas showers fall from the week's commissions gathered by C. A. King & Co. of Toledo. This firm's Christmas fund will be of age this season, at least it is so stated in their Special Market Report of December 4. The entire paragraph devoted to this subject, reading as follows:

Our Christmas Fund will be of age this season. It will be the 21st annual attempt of ours to spread Christmas joy. We give the gross commissions of the week before Christmas to invalids, business girls, newsboys and others. We do not take a brass band with us. We mention it merely so our charitable friends will help the fund along. Our dividends are Christmas smiles. Our idea is not copy-righted. Try it. Be happy.

Our artist, in depicting Santa, tried to make him look like Frank I. King. The drawing was shown to a friend of Mr. King's who said, "Is that Frank I. King? Well, God bless us!" Not like Tiny Tim

said it, no, not at all. It's Frank I. King nevertheless, at least the way he's going to look to the newsboys and others on December 24.

The holly, the mistletoe, the yule log and the wassail bowl, all refer to Christmas time. If you should say, "holly" to the average Toledoite in the grain trade he would think you were speaking a foreign language; if you referred to mistletoe you'd make no more impression than scribble on a hot-tent; the same goes for yule log. But if you said, "wassail bowl," O boy! you would be immediately surrounded by an excited, surging mob that could only be dispersed by policemen with a free use of clubs. Just a word of warning therefore. Do not mention "on 'Change" at Toledo anything like the foregoing expression during the next fortnight unless you have the goods.

As to the Christmas fund. Let us hope that the commissions of C. A. King & Co. will be swollen during the week preceding Christmas like a mountain stream in April when the snow melts and the rivulet becomes a torrent. Let us trust also that the newsboys, the invalids and business girls who will benefit by this action will have occasion to say on Christmas morning with happy souls every where, the words of Tiny Tim, "God bless us, every one."

ABOUT SPECULATION

"If there were no organized speculation, and therefore, no futures market, the elevator man after buying the grain from the farmer would have on his hands an out and out speculation from the time he bought the grain in the country until it was shipped to the terminal market and sold. His chances for loss during this time would be enormous, and in order to protect himself against such losses, he would simply pay the farmer less for the grain than he is able to pay under present marketing conditions. This is merely one of the many useful services performed by grain exchanges, by the futures market, and by organized speculation.

"We now have a free open market in which the world's buyers and sellers meet on equal ground. Should the futures market be destroyed, the business of marketing grain doubtless would resolve itself into a gigantic combine, and not a farmers' combine either, but in all probability an elevator combine which would completely control the situation, including prices.

"In the futures market, no one is compelled to speculate who does not wish to speculate. Without a futures market, everyone who handled grain would be compelled to speculate."—*L. L. Winters of Hulburd, Warren & Chandler in Late Letter.*

TERMINAL MARKET NOTES

Frank T. Caughy of the Caughy-Jossman Company of Detroit, Mich., has gone to his winter home in Florida.

The Ferguson-Sbircliffe Grain Company of Hutchinson, Kan., is being represented on the road by Roy Patrick.

Simons, Day & Co. have added Winnipeg, Man., to their line of Northwestern branch offices. It is in charge of P. F. Kennedy.

Simons, Day & Co. of Chicago, Ill., have opened a branch wire office in Minneapolis, Minn., under the management of F. B. Beaupre.

L. P. Nellis, formerly of Nellis, Witter Grain & Milling Company of Kansas City, Mo., is now in the office of J. S. Bache & Co. of Chicago.

The Halliday Elevator Company of Cairo, Ill., is planning to make the necessary improvements at their elevator for loading bulk grain on barges.

G. N. McReynolds of Alton, Ill., has succeeded E. G. Cool as traveling representative for P. H. Schifflin & Co., throughout Iowa and the Northwest.

J. C. Newsome, president of the Newsome Feed & Grain Company, Pittsburgh, Pa., was a recent visitor at the branch offices at Minneapolis, Minn.

Creditors of the Gee-Lewis Grain Company of Minneapolis, Minn., met late in November for the purpose of liquidating the company's business, and appointing a trustee. It was stated that the company's assets exceed its liabilities. Besides con-

ducting a general grain commission business, the company owned and operated the elevator at Kesota, Minn.

Trading in May wheat on the Chicago Board of Trade and other exchanges will commence May 15. It is expected to start about the March price.

The Springer-McComas Grain Company of Indianapolis, Ind., will dissolve as a corporation and plans are under way to continue as a partnership.

Ralph G. Williams, manager at Toledo, Ohio, for Lamson Bros. & Co. of Chicago, was recently elected to membership in the Toledo Produce Exchange.

Logan & Bryan of Chicago have opened a branch office at Duluth, Minn., in the Palladio Building. This is in addition to their office in the Board of Trade Building.

J. D. Kent has left the Taylor & Patton Company of Des Moines, Iowa, to become manager of the Des Moines Elevator & Grain Company, succeeding Frank Hall.

The rate of interest charged on advances at the Kansas City Board of Trade, Kansas City, Mo., for the month of December was placed at 7 per cent by the Finance Committee.

George Z. Bromley, until recently with the Ladish Milling Company of Milwaukee, Wis., has become manager of the New York City office of the National Grain Corporation.

H. P. Gisselin has left Kansas City, Mo., where he was associated with the Beyer Grain Company, to accept a position with the Scott-George Grain Company of Denver, Colo.

The Lewis Grain Corporation of Buffalo, N. Y., has filed articles of incorporation. Capital stock is named at \$20,000. The directors are: C. C. Lewis, John B. Stanton and J. E. Thrun.

Stein, Alstrin & Co. of Chicago, have appointed Edwin A. Boerner to represent them on "'Change." Mr. Boerner has been associated with the grain trade of Chicago for very many years.

Charles Rippin, traffic commissioner of the St. Louis Merchants Exchange, St. Louis, Mo., was recently elected vice-president of the National Industrial Traffic League at New York City.

John Kelly, associated with the hay and grain trade of Cincinnati, Ohio, for several years, has accepted the management of the hay department of the J. F. Costello Grain & Hay Company.

William C. House, recent salesman for the Baltimore Pearl Hominy Company of Baltimore, Md., has accepted a position with the Wathen Milling Company of Louisville, Ky., manufacturers of corn products.

Lamson Bros. & Co. of Chicago, Ill., are making arrangements to install a private wire on the floor of the Baltimore Chamber of Commerce; John T. Fahey & Co., acting as Baltimore representatives.

E. R. Thresher, formerly manager of the Omaha office of the Armour Grain Company of Chicago, Ill., has succeeded J. P. Glandon as manager at Omaha for the Vanderslice-Lynds Company of Kansas City, Mo.

Manuel Strom, recently manager of the Des Moines branch of Taylor & Bournique Company of Milwaukee, Wis., on December 1 became manager of a line of elevators in northern and northwestern Iowa, owned by G. E. Hiner.

Rufus Godfrey of the Godfrey Grain Company of Minneapolis, Minn., is again representing his firm on the trading floor of the Minneapolis Chamber of Commerce after being laid up at home the past few weeks with a broken leg.

Alva Wynekoop, cashier for Clement, Curtis & Co., grain and stock firm of Chicago, Ill., was arrested recently charged with misappropriating \$54,000 of the firm's funds and using same for speculation under an assumed name.

Changes have been recently made in the officers of the Ladish Milling Company, large feed manufacturers and associated with grain interests of Milwaukee, Wis. Lee M. Powell resigned from Bernhard Stern & Sons, Inc., to become president of the

company and other officers now are, H. W. Ladish, vice-president; P. P. Donahue, treasurer; Stuart Hyde, secretary. These officers with H. M. Stratton constitute the Board of Directors.

R. T. Morrison, head of the Morrison Grain Company of Kansas City, Mo., was married late in December to Mrs. Gertrude Edmonson of that city. After a honeymoon spent in the South they will make their home in Kansas City.

T. J. Patton has been elected treasurer of the Taylor & Patton Grain Company of Des Moines, Iowa, succeeding J. D. Kent. Gould T. Wells, formerly with the Des Moines Elevator & Grain Company, is now connected with the company.

The American Malt & Grain Company of Chicago, Ill., will hold a meeting December 22 at which a proposal to dissolve the company will be voted on. Holders of two-thirds of the capital stock must agree to the proposal in order to become effective.

Sherman J. Brown, correspondent at Richmond, Ind., of E. W. Wagner & Co., of Chicago, Ill., was married early in December to Miss Lois Johnson of that city. Mr. and Mrs. Brown spent their honeymoon in Chicago.

A petition in bankruptcy has been filed against Bolle-Watson Company, Inc., Produce Exchange, New York, by the Brainard Commission Company, Inc., Lewis Proctor & Co., Inc., and A. L. Russell, Inc., with claims of \$786, \$2,764 and \$26 respectively.

The Austin Boyd Company launched a general grain and mill feed business at Philadelphia, Pa., on December 1. Offices are in 522 Bourse Building. Mr. Boyd has been connected with the feed department of the Quaker City Flour Mills Company of Philadelphia for several years.

Henry W. Rogers, third oldest member of the Chicago Board of Trade, sold his membership early in December. He is 89 years of age. Mr. Rogers was president of the Board in 1881 and has served several terms as director. He retired from business in 1918. He has been in poor health for some months.

J. P. Griffin, manager of J. S. Bache & Co., of Chicago, and former president of the Chicago Board of Trade, has accepted the nomination for president of the Board during the coming year. Adolph Kempner was nominated for vice-president. There will be two candidates in the field, the other being Theodore E. Cunningham.

The J. F. Costello Grain & Hay Company of Cincinnati, Ohio, have sold its warehouse on the Southern Railroad in the west end of the city to the Bunting & Hill Company. Mr. Costello who relinquishes the active management of the warehouse will establish a hay and grain commission business with offices in the Thomas Building, Fifth and Main Streets.

B. J. Drummond of Cleveland, Ohio, has been appointed traffic manager of the Cincinnati Grain & Hay Exchange succeeding S. S. Reeves. Mr. Drummond has been identified with both railroads and large shippers, including the Chicago & Northwestern Railroad, Illinois Central Railroad and was formerly chairman of the Advisory Committee of the Traffic Managers' Committee of the Omaha Chamber of Commerce. The Traffic Committee of the Cincinnati Grain & Hay Exchange who selected Mr. Drummond is composed of E. A. Fitzgerald, C. S. Custer, H. M. Brouse, and H. E. Richter.

Jos. Wild, statistician for E. W. Wagner & Co., of Chicago and author of *The Wagner Letter*, will leave Chicago January 1 for an extended trip to California, and announces that some of the countries of the Orient may be visited. It has been no easy task during the past year to amalgamate the heterogeneous threads of market information into a harmonious whole representing a safe basis for financial investment. Mr. Wild has done this in so great degree of accuracy however as to surprise the oldest and best posted investors of LaSalle Street. The clients of the Wagner house both at home and among its various branches have had an excellent year and much prosperity at a time when most market wise people have attributed their adversity to an unusually perplexing season.

This Restless Age

A Straight Talk on the Problems of Speculating and Its Function in Grain Marketing

By LESLIE F. GATES*

AN INVITATION to address this gathering may well be considered as a genuine opportunity by any man who believes in the solution of problems through open frank discussion, because while you undoubtedly number some of radical tendencies as is true of almost any body of men nowadays, your reputation, in so far as it is known to me, is that of constructive effort and your prevailing councils have been guided by American ideas and characterized by new world ideals.

We of the grain trade realize the unrest which is characteristic of all occupations and which affects all classes of citizens at this time—we feel it ourselves. With us it is resulting in a determination that our service to the community shall be better understood by those we serve and coupled with that is an equal ambition to study and to better understand the needs of those we serve, so that through mutual understanding may come mutual appreciation and better service.

It was because of this determination that your friendly invitation was accepted, even though the preparation and experience of most business men fit them rather for informal discussion than for formal address.

To properly understand the functions of a grain exchange, we may well inquire what it is, how it originated and how it has come to be what it now is.

The Chicago Board of Trade with which I am most familiar may well be considered as a type of the American grain exchange, for it is older than most others and the younger exchanges differ mainly only through adaptation to local needs.

The Chicago Board of Trade is a commercial organization operating under a special charter from the State of Illinois, and composed of about 1,600 members of whom about 1,100 reside in and about Chicago.

In this membership is represented almost every human characteristic. We have wealthy men and men of very moderate means, greedy men and liberal, selfish and generous men, to whom service is simply incidental to their pursuit of wealth and men whose first thought is service and to whom financial reward comes only, if it comes at all, as a natural result of good service. We have men of dishonest tendencies and men of the highest integrity. In other words, it is a membership of ordinary human beings, with one thing in its favor as compared with any body of 1,600 men in other lines of activity; we do not accept into our membership any man known to be dishonest, or any man whose previous business experience has proved him lacking in business ability, or any man whose record indicates that he is likely to bring discredit to the organization, and further we eliminate through disciplinary measures any man who, after he becomes a member, is found guilty of acts of dishonesty or bad faith, either toward his fellow members or with any client or customer.

These 1,600 individual members acting as an organization furnish a trading place, adopt rules of business conduct, collect statistical and other information of interest to the membership, assist in the adjustment of business disputes and in general promote the common interests of the entire membership and protect the interest of those who through the individual members use the market facilities provided.

The Board of Trade transacts no business but furnishes a market place where all buyers and sellers may meet and transact business, or refuse to transact any business, as may suit their individual needs or satisfy their individual judgment. This trading is done by individual contract between private parties, in the open market place under rules that are known by all and subject to enforcement under the rules.

The prices at which private individuals have

bought and sold are recorded and disseminated in the form of quotations, which are simply a record of prices at which purchases and sales have been made.

These records of prices are known as Board of Trade quotations and so the very common error has resulted that a large number of people, honestly but mistakenly believe that the Board of Trade fixes prices. Nothing could be farther from the truth, nothing would be so destructive of an open market as an attempt to fix prices or to interfere with individuals in accordance with their individual judgment and in accordance with their own needs and ability.

The ideas that most members of the general public entertain regarding the grain exchanges remind one very much of the impressions gained by the six famous blind men of Hindostan who went to "see" the elephant. Almost everyone has come in contact either directly or indirectly with some phase of Board of Trade activity and a distorted and erroneous impression has been formed as to what the Board of Trade is.

A little knowledge is a dangerous thing and only through thorough investigation have we a right to form judgments, which in our minds take the form of convictions.

A proper conception and appreciation of the operations of the grain marketing machinery is not possible from a study of newspapers or magazines, even though they be trade papers or farm journals, for newspapers seek and publish news rather than truth and specialized journals are affected by the particular and selfish interests of their subscription lists. Much of the material given publicity in this way is intentionally sensational or prejudiced and even that which is published with the very best of intentions must necessarily be only partial truth occasioned by some particular occurrence which has suggested comment.

These incidental and only occasional and mostly sensational items or articles are then the source from which the farmer or the merchant or the teacher or the laborer obtains his impressions and forms his opinions or his judgments. The result is at least a mass of error or a collection of half truths. The regular daily work and service of the exchanges through and by their members remains for the general public a closed book, something mysterious, unknown and often feared and hated.

In the early months of 1917 Congress instructed the Federal Trade Commission to make a thorough investigation of the grain marketing machinery, because at that time prices of grain were very high and complaints were pouring in from consumers and employers of labor. The investigation and compilation of results has employed the activities of many investigators, statisticians and economists for the past three and a half years and the results are not even yet available. When the report is published it will contain much of interest and information, much of truth, but it would be going too far to expect it to be entirely free of error or from some conclusions of academic character only. We hope it will contain much of constructive suggestion and help in solving the grain marketing problems.

That we have many problems still unsolved no thoughtful member of a grain exchange will deny, for it is but an imperfect human machine and subject to constant improvement to meet changing conditions, but as at present constituted it is the result of the best efforts of generations of grain men whose intelligent self interest has worked out a higher degree of efficiency and a more economic machine than has been devised by any other body of men engaged in trade in any other commodity.

Starting as a voluntary association of merchants who desired to have a common meeting place, where buyers and sellers might transact business, it has, through organization and evolution, worked out a

system of rules which is the survival of the best business practice and which adequately protects all who make use of the market facilities afforded. And these trade rules are enforced in the public interest, as a study of our record of discipline will show.

If this were a body of grain handlers I might well at some length discuss the contest of interests by which, through evolution, the uniform grain grades have been worked out, or the long fight which finally resulted in the present reliable and fair weighing system for grain handled on our exchanges, or the adjustments of our basic contract grades to the changing needs of buyers and sellers. But before this audience I will may confine myself to a discussion of organized future trading as a factor in the handling of grain.

Marketing naturally divides itself into two parts—first, that of handling the raw material including its manufacture, and second, that of distributing and retailing the finished product. It is with the handling and manufacture of the raw material that grain exchange machinery is largely engaged. The grain that enters commerce is handled in bulk and in large volume by the individual buyer. This under ordinary conditions of finance and trade would necessitate large capital and entail large risk. To facilitate finance and to shift and distribute most of the risk of ownership, the present exchange system of marketing was devised, not by any one body of men at any given time, but by the united and organized grain trade, little by little, during the past 70 years. This development went hand in hand with the development of the necessity of finding a market for the ever increasing commercial volume of grain, much of which was offered for sale as soon as harvested.

Speculation in grain begins with the preparation of the seed bed and that risk of seed and labor and use of land has always been borne by the producer. This speculation does not always produce an abundant harvest, but such production as results imposes on the grower a further risk of ownership until the crop is sold. This risk of ownership follows the grain through the various handlers until it is finally consumed. Under ordinary merchandising conditions in other commodities this risk of ownership is passed along from producer to consumer in the form of a heavy toll to cover the risk assumed, and this would be true of grain were it not for the system of future trading through which the risk of ownership is shifted and distributed.

In production the risk is distributed among some 6,000,000 farmers and the risk on any single crop under diversified farming is relatively small. In the trade the number of handlers is comparatively small and the unit of risk large. Through future trading, which in this case is called "hedging," the owner of the grain frees himself from most of the risks of ownership during the period of storage or merchandising and the conservative grain buyer would no more seriously consider carrying his grain unhedged than he would think of giving up his fire insurance. If his banker were to learn that he was not hedging his grain, his line of credit would in all probability be withdrawn, for the banker would hold that the merchant was no longer worthy of being considered a conservative merchant.

Those laymen who have made a study of the grain marketing system have, generally speaking, been willing to recognize the economic value of hedging facilities. They see the value of reducing toll as between the producer and consumer of the raw material. They see the advisability of distributing as widely as possible that risk of ownership. The thing which they have not generally recognized on a partial examination of the situation is, that speculation and hedging go hand in hand. They do not see that for every hedging sale there must be either a hedging or a speculative buyer and for every hedging buyer a hedging or speculative seller, and that inasmuch as supplies never collect on the market exactly as needed, someone must appear as a ready buyer or seller if the hedging system is to be a success.

A bill recently introduced in Congress by your

*An address delivered at the International Farm Congress at Kansas City on December 9.

president, together with the brief accompanying it, furnishes very interesting reading. There is in this brief a recognition of the value of a hedging market, but there is a wish expressed that all speculative dealings shall be eliminated. This bill was promised us by its author early in September, up to which time since open trading in wheat was established on July 15, 1920, the market had been very largely of the character which he now wishes to make permanent.

To make a purely hedging market effective would require legislative action, compelling all users of grain to place their buying order in exact proportion to the daily offerings of hedging sales. Such a situation is, of course, absurd on its face. The greatest trouble with the effort to sustain values during the past four or five months has been the failure of domestic users to provide in any way for their future needs, while the surplus of the 1920 crop has been offering for sale.

Commercial stocks of wheat in this country are fully 100,000,000 bushels below normal. There have been no hedging purchases of consequence against sales of flour for serial shipment in the domestic trade, because there have been very few such sales.

A propaganda officially started and cordially welcomed and emphasized by the hard pressed consumer has brought about such a lack of confidence in values of all commodities as to discourage any prospective buyer, with a result that moderate offerings have had the effect of depressing values out of proportion to their volume.

Speculative buyers who have had the temerity to attempt to stem this tide of public sentiment have had occasion to experience the cost of assuming the risks of ownership. "Public sentiment," as one of our most able grain men once said—"is the greatest force save one, that of truth." Not until the truth is generally known in regard to the world situation respecting wheat, will public sentiment change, and not until public sentiment changes in its attitude toward making provision for further needs and makes commercial commitments accordingly, will the situation be remedied.

The insurance feature in hedging is, of course, a protection only to those who make use of the hedge. If all who might make use of this protection, either as buyers or as sellers would at the proper time make their commitments, speculative opportunities would very largely disappear.

The farmer might very well, either individually or collectively, supply the crop as wanted by the consuming hedger and in some individual cases he does so to his own protection and advantage, but the practice is not general because the opportunity for such protection is not generally understood by the grower. Large consumers might similarly protect themselves on their current and future supplies, but they have not been educated to do so in any general way. Furthermore, so long as a market shows an advancing tendency the grower would not be likely to accept the price offered no matter how satisfactory from the basis of cost of production, because he would be continually buoyed up by the hope that the market would advance to still higher levels to his greater advantage. Conversely, the consuming buyer withholds his support from a declining market hoping to obtain his supplies at even lower levels; hence the opportunity of and need for the speculative buyer and seller if a hedging market is to be maintained.

To attempt to maintain a future trading market on a purely hedging basis would result disastrously, and so long as we produce surpluses for competition with other surpluses in a world's market, the burden of such limitation would fall on the very man such measures are intended to benefit. Because every added cent of cost, including the added margins which it would be necessary for buyers to secure to protect them against the risks of ownership in the absence of an adequate hedging market, would be deducted from the price they would pay, because the surplus must compete with other surpluses in world trade.

If, for instance, each handler between the grower and the foreign buyer were to exact a moderate toll of 10 per cent under such conditions, the total

toll would be 40 per cent or 50 per cent, whereas under present conditions, a total toll for all of them, as shown by the Government records, is not in excess of 10 per cent. This developed in a congressional inquiry following the complaint of Congressman Doolittle of Kansas in 1914.

Because present crops have been produced at what is probably the highest cost ever recorded, the grower feels that he has great complaint because prices now offered are below his figured cost of production.

Year in and year out, under the present marketing system, the farmer will secure cost of production, but there is no system, nor do I believe any system can be devised, which will insure to the producer the cost of production on every crop he grows. Sometimes he will make a very large profit over the cost of production, as was probably true during the early years of the world war, but from such unusual profits, he, as a business man, will have to accumulate reserves to cover the occasional loss when economic conditions the world over will not insure him such a profit. Neither will the producer be able to devise any system which will relieve him of the risks of ownership so long as he holds his grain unhedged, nor will he be able to exempt himself from the operation of economic laws.

The idea that intelligent foresight is rewarded and should be rewarded and that unintelligent foresight is penalized and should be penalized, is in thorough keeping with economic law and with American ideas.

Speculation opened and developed this great western granary; speculation spread the net work of transportation over this belt. This speculation was not always wise or profitable, but it has resulted in the present facilities. Speculation will never be wholly wise or wholly intelligent. Even legislative speculation is subject to the same characteristics as other forms of speculation. Speculation will always be present in the raising and marketing of farm products. The producer may assume to do all the speculating himself or he may, by intelli-

gent co-operation and investigation, so inform himself or his agents that he can use the marketing machinery for his own protection; he cannot permanently fix prices, for this would mean monopoly, which would be unacceptable to the country as a whole.

This paper has not attempted to be a complete discussion of the problems now surrounding the grain exchange, nor could any brief paper adequately cover these problems. It may, however, provide sufficient basis for friendly discussion.

The period since the armistice has well been termed "The Restless Age." This restlessness affects the entire country and even the whole world. It is potent for good or evil. An ignorant restlessness is characterized by thoughtless, extravagant utterances calculated to further inflame the public mind, and so leads to hurried destructive methods of correcting real or imaginary ills. Its logical result is chaos—anarchy. An intelligent restlessness separates real from imaginary ills or inequalities, determines their cause, seeks by sober constructive measures a suitable remedy. Its results are orderly and progressive. All the progress the world has ever made has been the result of intelligent constructive unrest.

The individual wholly satisfied with his own or his neighbor's surroundings never contributes anything to human progress. The restless age may then, if properly directed, become a period of unusual progress, but to have such a happy outcome, sane counsels must prevail. Education must drive out ignorance. Thorough investigation must replace uninformed complaint. Foundations of truth must be laid rather than the cheaper and more readily available half truths which are worse than error. Only so may we expect any structure to be reared which will be of more than temporary usefulness. Only so shall we contribute to human progress.

To you of this Farm Congress I appeal to use your large influence on the side of education, investigation, and constructive criticism to the end that out of this present unrest may come genuine lasting progress.

COMMUNICATED

THREE PER CENT TAX APPLICABLE TO ALL DEMURRAGE CHARGES

Editor American Grain Trade:—We are advised that the Commissioner of Internal Revenue, United States Government, has issued a new decision, approved November 27, 1920, to the effect that the transportation tax of 3 per cent applies to all demurrage charges.

This new ruling is contained in Treasury Decision 3096, which revokes Treasury Decision 3022, approved May 26, 1920. The latter decision exempted the application of the tax on demurrage charges accruing at destination.

The Internal Revenue Office advises that Treasury Decision 3096 is retroactive to the effective date of the Revenue Act of 1918 and that Treasury Decision 3022 is to be considered as never having been in effect. Furthermore, carriers will be expected to collect back, wherever possible, the refunds which were made under Treasury Decision 3022.

Yours truly,

J. S. BROWN.

Chicago Board of Trade.

FROM AN OLD FRIEND

Editor American Grain Trade:—An article entitled "The Farmers' Wheat Strike" in the *Literary Digest* under date of November 20, 1920, has called my attention once more to the good old "American Elevator and Grain Trade" and the wheat prices of the '80's. We were there. To peruse some of the wise suggestions pro and con, one would be lead to infer that the World War was a thing of the past, instead of which we are still in the throes of the greatest tragedy of the ages with human life at the average of 30,000 daily probably still the toll.

Our gallant farmers, when the world war was in

its seemingly greatest need, at Uncle Sam's suggestion, took \$2.26 per bushel, Chicago, for their wheat when every other commodity almost was being exploited by the profiteers. If Uncle Sam had not put an upset price on wheat it would have gone to \$5 or \$10 per bushel and flour in proportion. Now that the farmer has come into his own he is entitled to his inning. The farmer should not only hold his wheat but hold his corn as well.

The old adage is "Never bull the tail end of a small crop and never bear the tail end of a large one"—even in ordinary times. Now we are in extremely extraordinary times. Peace is only measured by time and any league or treaty is only measured by a scrap of paper. Wars will continue to the end of time and the peace dove only remains when the "Prince of Peace" controls. Success to the honest farmer; he will come into his rights by organizing and is worthy of his hire.

My family and myself love this beautiful part of our fair domain, especially the good and cultured people here in Berkeley. With my best wishes to all the old timers in the grain trade.

Yours fraternally,

E. R. ULRICH.

Formerly of Springfield, Ill.

NEWS FROM TOLEDO

Editor American Grain Trade:—There is no particular change to note in the milling situation here in Toledo from a month ago. Our mills are operating about 40 per cent capacity, compared to 80 per cent last year at this time. The demand for flour is very dull and the trade lacks snap. Prospective buyers have been driven out of the market by the recent sharp advance in the price of wheat and they are delaying purchases in the hope that the mar-

ket may sustain a setback and purchases may be made on a more satisfactory basis.

The demand for mill feed is also dull. This is due somewhat to the higher wheat price, but more especially to the fact that farmers and dairymen in the country districts have evidently decided to use home-grown feeds on account of the low prices of corn and oats, rather than pay a higher price plus freight and haulage for commercial feeds.

The *S. S. Anna Minch* arrived today (December 8) with 230,000 bushels of Canadian wheat consigned to a local mill. This makes about 1,500,000 bushels of Canadian wheat received in this market since harvest.

The Red Clover market here has been very active. The price shows a range of \$4.50 for the month of November. Receipts for the month were 8,000 bags against 6,500 for November, 1919; shipments 1,950 against 2,400 a year ago. There is not enough Alsike moving to make a good market, however the price shows a range of about \$3 for the month. Receipts were 350 bags against 1,350 in 1919; shipments 150 as against 600. Stocks of Timothy are plentiful and the market steady. Price shows a range of 25 cents for the month of November. Receipts were 4,200 for November compared with 10,000 in 1919; shipments 500 against 1,000 last year.

H. D. Raddatz of H. D. Raddatz & Co., spent last Friday and Saturday transacting business in Chicago.

J. A. A. Geidel of Pittsburgh stopped off in Toledo on his return from the Farmers Grain Dealers convention at Chicago and spent a few hours with friends on the Exchange floor here.

Raymond P. Lipe has returned from a two weeks vacation spent at Hot Springs, Ark., and New York City. Mrs. Lipe accompanied him.

Yours truly, C. O. BARNTHOUSE,
Toledo, Ohio.

MINIMUM WEIGHTS ON GRAIN AND GRAIN PRODUCTS AS PROMULGATED BY INTERSTATE COMMERCE COMMISSION

SPECIAL PERMISSION NO. 51215

It appearing, That on August 21, 1920, the Commission issued Special Permission No. 50450 authorizing carriers generally throughout the United States to file with the Interstate Commerce Commission special supplements establishing certain increased carload minimum weights on grain and grain products, and rules and regulations applicable thereto, which minimum weights and rules were generally published and made effective in tariffs containing provisions for expiration upon December 31, 1920, and the establishment upon January 1, 1921, of the minimum weights and regulations in effect immediately prior to November 3, 1919, and,

It further appearing, That information in the possession of the Commission indicates that the emergency which justified the establishment of said increased minimum weights no longer exists to the same extent, and

It further appearing, That prior to November 3, 1919, the minimum weights and rules applicable in connection therewith were in many cases not uniform, creating in some instances discrimination between localities or individuals, and that it is desirable that minimum weights on grain and grain products and rules applicable thereto throughout the country approach uniformity in so far as possible.

It is ordered, That all carriers and their lawfully appointed agents are hereby authorized to publish and file on 10 days' notice to the Commission and the general public, special supplements to their tariffs canceling the minimum weights, rules and regulations applicable thereto now published to become effective January 1, 1921, upon the expiration of the minimum weights, rules and regulations applicable thereto authorized in Special Permission No. 50450 as amended and establishing minimum weights on grain and grain products and rules and regulations applicable thereto, as follows:

ON GRAIN all kinds (except oats and ear corn, snapped corn or corn in the shuck), minimum weight marked capacity of car, except where marked capacity

is less than 50,000 pounds, in which case minimum weight will be 50,000 pounds per car (subject to notes 1, 2, 3 and 4 below).

ON OATS and EAR CORN, SNAPPED CORN OR CORN IN THE SHUCK, straight or mixed carloads, minimum weight 80 per cent of marked capacity of car, except where marked capacity is less than 50,000 pounds, in which case minimum weight will be 40,000 pounds per car (subject to notes 1, 2, 3 and 4 below).

Note 1: Oats and Ear Corn, Snapped Corn or Corn in the Shuck, in mixed carloads with other grain, will be subject to minimum weights applicable to "Grain, all kinds (except oats and ear corn, snapped corn or corn in the shuck)."

Note 2: Actual weight will apply in the following cases:

(a) When grain is loaded at point of origin to within 24 inches of roof, at side walls of car, for the purpose of Federal or Official Grain Exchange inspection.

(b) When grain is loaded to proper grain line of cars so marked.

(c) When car is loaded to full space capacity.

When any of the provisions of this note are applicable, notation to that effect should be inserted in the bill of lading by shipper or agent of the carrier, but failure to make such notation shall not prevent the application of the terms of this note upon presentation of suitable proof. Such notations should be specific, indicating on which of the three grounds herein specified, actual weights should be protected.

Note 3: When grain in transit is, for causes beyond the control of shipper or owner, transferred from one car to another of greater capacity (either direct or through elevators), the minimum weight applicable to the car from which transfer is made shall apply to the car into which the shipment is transferred.

Note 4: When carrier cannot furnish car of capacity ordered by shipper and for its own convenience furnishes a car of greater capacity than the one ordered, such car may be used on the basis of the minimum weight applicable to the car ordered by shipper, but in no case less than actual weight; the capacity of car ordered, number and date of the order to be shown in each instance upon the bill of lading and carrier's waybill.

When actual weight is more than 10 per cent in excess of the marked capacity of the car ordered by shipper, the minimum weight shall be that applicable to the car in general service, the capacity of which is next greater than the capacity of car ordered. When shipper orders a car of marked capacity less than 60,000 pounds and carrier furnishes a car of greater capacity, the minimum weight shall be 60,000 pounds, but not greater than the marked capacity of car furnished.

ON GRAIN PRODUCTS, namely

Barley, cracked, flaked, pearl, roasted, rolled, sprouts, dry,

Bran,

Brewers' cerealine, brewers' corn flakes, brewers' flake, brewers' grits, brewers' meal,

Cerealine, other than brewers',

Chops, grain (chopped feed),

Cracked corn, corn flake, corn germs, corn germ meal, cornmeal,

Farina,

Farinose,

Feed, chopped,

Feed, gluten, hominy, nutriline,

Feeds, Live Stock or Poultry, consisting in part of grain or grain products, when taking grain, grain product or grain by-product commodity rates.

Flour, buckwheat, barley, corn, feterita, kaffir corn, milo maize, mixed grains, oat, pancake, potato, prepared, rye, spelt, wheat.

Food preparations, cereal, not otherwise specifically provided for herein when subject to grain or grain product (flour, meal, etc.) commodity rates,

Grain products, not otherwise specifically provided herein when subject to grain, grain product or grain by-product (flour, meal, etc.) commodity rates,

Grits,

Groats,

Hominy, hominy flake, hominy pearl,

Maizes,

Malt, malt sprouts,

Middlings,

Mill feed,

Millstuffs,

Oat feed, oat flake, oat meal,

Oats, cracked, rolled,

Rye, cracked, crushed, rolled,

Shipstuff,

Shorts,

Wheat, cracked, crushed, flaked, granulated, rolled,

in straight or mixed carloads, or in mixed carloads with other articles when tariffs provide that the grain, grain products or grain by-product (flour, meal, etc.) commodity rates apply on such mixtures.

Minimum weight, 40,000 pounds per car (see notes 1, 2, 3, 4 and 5).

Note 1: When the car is loaded to full space capacity, actual weight will apply.

Note 2: Actual weight will apply upon molasses feeds or other stock feeds having liquid sweetening ingredients (not medicated or condimental) when cars are loaded at point of origin to within 24 inches of the roof at the side walls.

Note 3: On grain and grain products handled under transit arrangements the minimum weight from transit point will be the same as the minimum weight into the transit point, except, when a car of less capacity is furnished at transit point, in which case the minimum weight as applicable to such car of less capacity will apply; or where the shipment from transit point consists of grain products, the minimum weight on such grain products from transit point will be the same as provided on grain products into the transit point.

Note 4: On mixed carloads of grain and grain products the minimum weight as applicable to shipments of grain products in mixed carloads will apply, provided the weight of the grain which may be included in such shipment shall not exceed 33 1/3 per cent of the total weight loaded in such mixed carloads. If the weight of the grain which may be included shall exceed 33 1/3 per cent of the total weight loaded in such mixed carloads, the minimum weight as applicable to such

grain will apply, except when car is loaded to full space capacity the actual weight will apply.

Note 5: When minimum weights were on November 3, 1919, greater than 40,000 pounds, such minima may be substituted for the minimum of 40,000 pounds named herein.

and they are hereby permitted in the filing of such supplements to depart from the requirements of rule 9 (e) of Tariff Circular 18-A as to the number of supplements or the volume of supplemental matter to, which the tariff is entitled, including tariffs of less than 5 pages, such supplements to contain no other matter; and to depart from the terms of rule 8 (f) of said Tariff Circular, which provides that the cancellation of an item or items must be made under the same item numbers (with suffix attached) as borne by the cancelled items;

And provided, That in the next regular supplement to or reissue of such tariffs, the special supplement herein authorized shall be cancelled and the minimum weights, rules and regulations therein contained to be published in accordance with the requirements of the Commission's tariff rules.

And provided, That the minimum weights, rules and regulations authorized above shall not apply to narrow gauge railroads or railways.

And provided further, That each and every supplement shall carry on its title page the notation:

"Departure from the requirements of rule 9

(e) of Tariff Circular 18-A is authorized under Special Permission of the Interstate Commerce Commission No. 51215 of December 3rd, 1920."

By the Commission, Division 2:

(SEAL)

GEORGE B. MCGINTY,

Secretary.

This authority which is limited strictly to its terms, does not waive any of the requirements of the Commission's published rules relative to the construction and filing of tariff publications, or any of the provisions of the Act to Regulate Commerce, as amended, except as hereinabove provided. It is void unless the supplements issued thereunder are filed with the Commission on or before January 31, 1921. Such supplements must bear the notation "Issued on 10 days' notice, under Special Permission of the Interstate Commerce Commission, No. 51215 of December 3, 1920."

SECRETARY MEREDITH MAKES RECOMMENDATIONS

In his report to the President on December 10, Secretary of Agriculture Meredith made the following recommendations of activities for the Department next year:

Studies in the cost of marketing so that the proportion of the consumer's price received by the producer and the proportion received by various marketing agencies can be ascertained.

Extension and development of co-operative marketing work.

Establishment of a world market-reporting service to make promptly available comprehensive and dependable information as to production, supply, prices of, and demand for agricultural commodities in different parts of the world.

The consolidation of the Bureau of Markets and the Bureau of Crop Estimates for the sake of economy and greater efficiency.

Material expansion of the studies of the cost of producing farm products.

Thorough-going scientific study of the whole problem of farm labor.

The making of every feasible effort to aid the farmer in obtaining necessary personal credit.

Broader studies of the methods employed and results obtained by farmers in attempts to improve their credit through united and co-operative action.

The direction, through thorough-going studies, of national thought toward solution of the problem of farm ownership.

Increased attention to land settlement and colonization, to the end that the buyer may have full and complete information for his guidance.

An expansion of the studies of life on the farm, to the end that the better things of life may be brought in increasing measure to the rural community, so that strong, intelligent, well-seasoned families will not abandon the farming community for the city.

Proper encouragement of all feasible means to limit the hazard of agricultural production.

Expansion of the work already begun by the Department in finding means for utilizing surplus waste farm products.

A still further spread of extension work among farm women, and an acceleration of research work in home economics.

That the nitrate plant at Muscle Shoals be put in

operation, to the end that this nation may escape once for all from dependence upon foreign nitrate fields.

The appropriation by Congress at its next session of funds to continue the Federal-aid road program, to be expended under the terms of existing legislation, with certain modifications, at the rate of \$100,000,000 a year for a period of five years, beginning with July 1, 1921.

The appropriation of sufficient funds to permit the Department to co-operate effectively with all the states prepared to work with it in preventing and controlling forest fires and other causes of forest devastation.

The reforestation of devastated lands within the national forests and the enlargement of the national forests by further land purchases and exchanges of land or timber for private lands of equal value.

A restoration of forest experiment station work to the status it had before being curtailed by reduced

appropriations, and the establishment of at least one station in each of the main forest regions.

Action toward developing the public resources in Alaska by lodging authority in men on the ground to act without waiting to consult distant superiors, as has already been done by the Forest Service in administering the national forests.

Amendments to a number of important laws administered by the Department of Agriculture to the end that their enforcement may be more effective.

Authorization of the Secretary of Agriculture to appoint a director of scientific work and a director of regulatory work, to devote their attention to development and coordination of research and regulatory activities of the various branches of the Department and their coordination with similar lines of work in the various states.

Appropriations sufficient to permit of justice to the employees of the Department of Agriculture in the matter of salaries and equipment for work.

transfer spout, and may be operated straight up and down or at any angle at which the grain will flow, through the full arc of a circle. It is designed for use at the head of the elevator or fitted to a trolley and mounted on angle-iron tracks under the receiving bins. It is light in weight and one man can change it from place to place. Owing to the close connection underneath the bin and small space required, the spout will work where many others cannot be used.

The spout is practically dust tight as the arrangement is such that there are no openings for the dust or material to escape around the spout connection, regardless of the position of the spout. Grain will run on less incline and by using both the top and bottom of the spout for the run of the grain, double wear is secured. One of the features of the spout is the saving in the height of the buildings. The manufacturers will be glad to furnish interested parties more complete particulars regarding this new grain elevator appliance.

SCALE REQUIREMENTS

To assure yourself protection on loss and damage claims, under the provisions of I. C. C. Docket 9009, all new scale installations should conform to the rules suggested by the Interstate Commerce Commission. These provisions do not govern scales installed previous to the date on which the rules go into effect provided such scales meet the required tests for sensibility and accuracy. Such of the provisions as are intended to apply to all scales, no matter what the date of installation may be, appear in black face type.

TESTING AUTOMATIC SCALES

1. Scales in regular service shall be tested at least once each year, and every six months, where practicable, by an inspector experienced in the testing of automatic scales.

2. The empty balance of the scale shall be tested before any adjustments or changes of any kind are made in the scale, and a record of the error in balance, if any, shall be made.

3. All scales shall be tested, for ratio. If the scales are provided with weight boxes, standard test weights, amounting to not less than 25 per cent of the rated weighing capacity of the scale, shall be placed on each side of scale, i. e., in the weight

TRADE NOTES

The Leonard Construction Company of Chicago, Ill., has just completed Elevator B for the Quaker Oats Company at their plant at Saskatoon, Saskatchewan, Canada. The elevator is built of reinforced concrete and has a capacity of 100,000 bushels.

The firm of Thompson-Stephan Company has been organized at Chicago, Ill., to engage in the construction of grain elevators, flour mills, warehouses, etc. Martin M. Stephan was connected for years with various Chicago grain elevator building firms and John K. Thompson was the general superintendent for Witherspoon-Englar Company on the Calumet Terminal Elevator.

Claybaugh-McComas Elevator Brokers is the style of a new firm to engage in the grain elevator brokerage business at Frankfort, Ind., and Indianapolis, Ind. They will list properties in all parts of the country, and offer service to those who wish to buy or sell. The Frankfort office is at 221 Board of Trade Building in charge of Nat Claybaugh and the Indianapolis office at 601 Board of Trade in charge of John McComas.

There is condensed in 23 pages of a most modern prepared book, illustrations and plans of about as presentable a line of country grain elevators as one would be likely to find anywhere. The elevators and mills shown are the work of Ballinger & McAllister of Bloomington, Ill., engineers and contractors of grain elevators, flour mills, warehouses, coal plants and storage of all kinds. This firm, composed of men with life long experience in grain elevator building work, established this business at Bloomington only a few years ago and the list of their work presents a very fine record of achievement. Send for the book if you haven't a copy. It will make you acquainted with what is best, altogether modern and most serviceable in meeting various conditions, in the science of grain elevator construction.

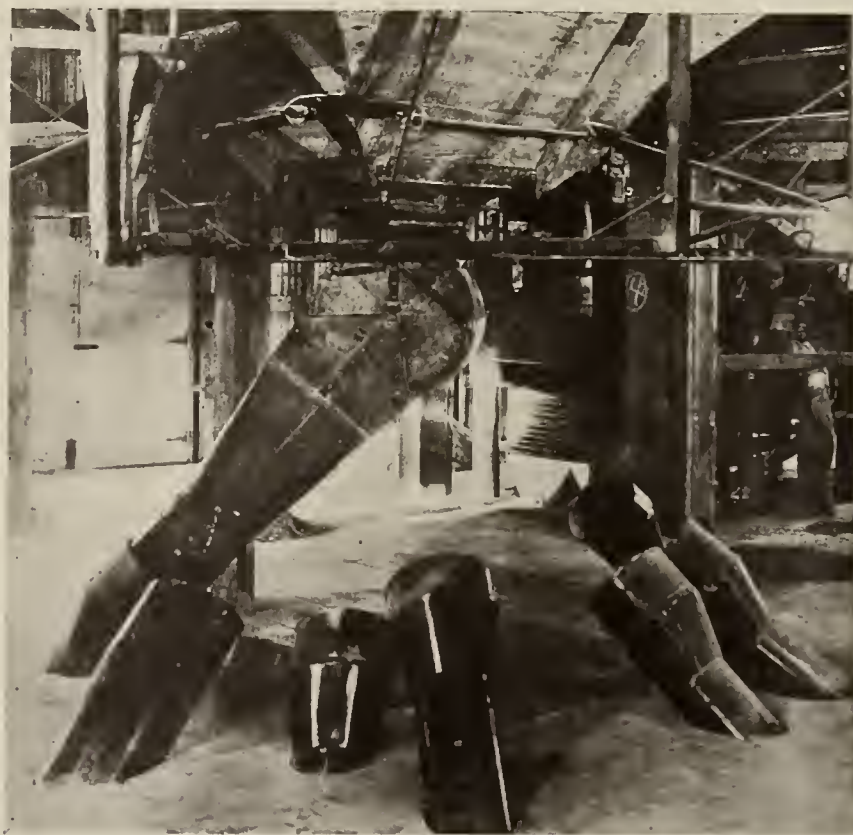
Calendar pads for 1921 are now being mailed by the Weller Manufacturing Company of Chicago, Ill., for the Southgate Desk Calendar frame, which this well known grain elevator and flour mill machinery house mailed to their friends several years ago and for which renewal pads are sent every year. Each year the calendar has marked an increased business and larger number of patrons for Weller-made machinery. It not only marks the days and furnishes a ready reference memorandum for things not to be forgotten, but daily reminds the owner of some of its machines which he might need in his plant. It lists not only grain handling machinery but ore handling machinery, coal handling machinery, screening machinery, for cement mills, gravel washing plants, brick yard machinery, for paper mills, cotton oil mills, for the cannery, glue works and refineries, for cement mills, the power house, concrete mixing plants, etc.

The Morse Chain Company of Ithaca, N. Y., has established a branch factory at Detroit, Mich., which will be devoted exclusively to the manufacture of silent chain sprockets and the Morse ad-

justment. F. C. Thompson is general manager of the new plant, F. M. Hawley is chief engineer and C. B. Mitchell, factory manager. The company states that since their first buildings were erected at Ithaca in 1907 they have continuously added new buildings; in fact have never ceased construction and now have three large construction gangs at work on two large concrete buildings making considerable addition to their seven acres of floor space now under roof as well as another concrete stack 185 feet high providing for additional power plant equipment. The Detroit plant was added to partially relieve the Ithaca works which were becoming too small to accommodate the steadily increasing demand for Morse Silent Chain Drives for grain elevators, mill and heavy factory drives and give the prompt, efficient service which President F. L. Morse has always insisted must be maintained as the slogan and watchword of Morse Industries.

THE WRAY FLEXIBLE SPOUT

The many advantages offered by the Wray Flexible Elevator Spout, manufactured by the Weller Manufacturing Company of Chicago, has commend-



THE WRAY FLEXIBLE ELEVATOR SPOUT

ed it to many elevator operators. It is the invention of a practical elevator man, who in order to gain certain ends, produced a spout that is entirely different from any other on the market. It has been found that for many installations it fits in better and gives more satisfactory service than can be obtained by other special radial spouts and at considerable less expense.

It is built both as a trolley spout and as a fixed

boxes and in or upon the grain hopper. The minimum amount of test weights to be 100 pounds.

If the scales are of the unequal arm or high multiple type, the ration shall be tested in the manner employed in testing ordinary hopper scales; i. e., standard test weights shall be applied to the hopper and balanced by the standard counterpoise weights belonging to the set of the inspector.

4. Any scale shall be considered inaccurate

which cannot be adjusted within a tolerance on ration of 4 ounces per 1,000 pounds and be maintained within a tolerance of 8 ounces per 1,000 pounds of test load applied.

5. All scales shall be tested when loaded to the equivalent of their rated capacity per draft of wheat for their sensibility reciprocal, and be considered inaccurate should the S. R. exceed the figures in the table in Section 4, Item 15.

6. All scales shall be tested to determine their ability to repeat their weighings. This test shall be made by not less than 10 consecutive drafts of the heaviest grain and also tested by not less than 10 consecutive drafts of the lightest grain ordinarily weighed over the scale when possible... The action of the scale shall be such that it will repeat its performance on successive drafts to within 0.4 per cent of the weight of a draft. Where possible, this variation shall be measured by the application of standard test weights required to balance.

It should be understood in connection with the above provision, that the net error in weighing several drafts, even should the compensator be adjusted in reference to one trial only, cannot exceed 0.2 per cent under the most unfavorable conditions and on an average when the compensator adjustment is based on several trials, that the average net error on several drafts will be less than 0.1 per cent.

7. The standard counterpoise weights shall be used for testing leverage ratio and value of poises.

8. The standard of mass for testing automatic grain scales shall be derived from primary weights, verified by the United States Bureau of Standards, Washington, D. C., to within what is known as their "Class B" tolerance.

9. The 50 pound secondary or working cast iron weights used directly in testing scales should be rectangular and of such design as to facilitate stacking; they shall be free from pockets, blow-holes, etc., which are liable to catch and hold foreign matter. No adjusting cavity or cavities in the bottom of such weights shall be permitted. These weights shall be tested and adjusted in comparison with the master weight, which has been verified to within "Class B" tolerance. The working weights shall be adjusted to within 20 grains, and maintained to within 50 grains of their true value.

10. Scales shall be kept in the closest possible adjustment and shall be considered inaccurate, when they cannot be adjusted and such adjustment maintained to within the tolerance shown in Sections I and IV.

11. The inspector shall make a record of each test which shall include date of test, the amount of error found, if any, the repairs and adjustments made or recommended, if any, the date when the repairs recommended are completed, the name of the scale inspector making the test and making any repairs; also the name of the manufacturer, association, firm or individual with which the scale inspector is associated.

ELEVATORS IN THE CANADIAN PRAIRIE PROVINCES

The grain elevator system has grown enormously in Canada and developed rapidly in the last few years. This growth and development has so far been mainly confined to the prairie provinces of Manitoba, Saskatchewan and Alberta, but the system is attracting more attention in the other provinces, particularly in Ontario, where several wheat growing and shipping centers, notably Toronto, are agitating for the erection of elevators. Nor is it only in numbers that the system has extended but the increase in size has been such that some of the structures can fairly be termed mammoth, such for instance as those at the Head of the Lakes.

There are, according to the Hon. George Langley, Minister of Municipal Affairs for Saskatchewan, not fewer than 3,800 elevators in the three provinces referred to, from 40 to 60 feet high and capable of storing from 20,000 to 30,000 bushels apiece on the average, a few reaching to twice the greatest enumerated capacity. In other words upwards of 110,000,000 bushels of wheat can be thus stored at the one time. By the terms of the Canada act the owners of elevators mostly private individuals or

incorporated companies are compelled to accept all the grain offered by farmers unless wet or unsortable with safety, hence the general and common use of the system. The elevators are all licensed by, and are under the supervision of the Board of Grain Commissioners of Canada.

NEW MONITOR REPRESENTATIVE IN THE SOUTH

Our southern milling friends will be interested to know that the celebrated Monitor line of machinery is now again represented in the South by a direct representative, D. F. Parker whose likeness we present.

Mr. Parker was born in Danville, Va., February 28, 1886. Educated in the public schools, he early was attracted to the milling business and started on July 1, 1902 with the Twin City Mills of Bristol, Va. He remained with them some two years and that he was a natural born miller is shown by the fact that after two years experience in this 200-barrel mill, he left to take the position of second miller in the 500-barrel mill of the Sparger Mill Company of Bristol, Va. Again he showed his aptitude for the milling business by another advance in station, going with the H. B. Staley Company of Marion, Va., as head miller of their 100-barrel mill in 1907. He remained with this concern for 11 years when he leased a mill at Shores, Va., and became the proprietor of his own business. However, this venture was ruined through the plant being burned in 1920, again forcing him to seek work in some plant. He selected the Austin Heaton Company of Durham, N. C., going with them as night miller of their 800-barrel plant. Shortly after this it was that the Huntley Manufacturing Company of Silver Creek were so fortunate as to secure his



D. F. PARKER

services and, although his employers were loath to see him leave, they generously accepted his resignation and wished him well in his new vocation. We have no doubt but that he will rapidly widen the circle of his friends and soon be a welcome visitor all through his territory. Make a memorandum of his home address. D. F. Parker, 614 North Queen street, Durham, N. C., and write him whenever you are in need.

ON DECEMBER 13, the Senate passed the Gronna-Norris Bill extending financial assistance to the farmers by the restoration of the War Finance Corporation, which will aid in the export of farm and manufactured products. The Bill as passed was rendered almost innocuous, so far as direct farm aid is concerned.

INVENTOR OF CORN SHELLER DIES

John Beall, the inventor of the Western Corn Sheller, grain cleaning machines and other milling appliances, died of pneumonia on November 20 at the home of his daughter, Mrs. R. A. Peake of Decatur, Ill. Mr. Beall was nearly 91 years old at



THE LATE JOHN BEALL

the time of his death. Until his retirement six years ago he was the head of the Beall Improvements Company of Decatur and was largely responsible for the marked success of that firm.

Mr. Beall was born in Bridgeport, Ohio, March 19, 1830. He went to Decatur 66 years ago and has made it his home ever since. He was an expert millwright and mechanic and spent most of his life inventing and improving machinery for the handling and milling of grain. He invented up to the time he was 80 years old, and every invention was practical and has been widely used. His Western Corn Sheller is used throughout the world, wherever corn is grown.

Mr. Beall had a host of friends, and of late years every birthday has been remembered with many floral offerings. He was one of the oldest members of Grace Methodist Church of Decatur, and has always been a power for good in the community. He was married twice and had four children, two of whom survive, Mrs. Peake and W. L. Beall of Chattanooga, Tenn.

A USE FOR CORN

A recent technical bulletin, No. 904, issued by the United States Department of Agriculture, calls attention to the enormous quantity of corn used each year in the manufacture of corn oil. The war stimulated the production of vegetable fats and the millers of corn have made the most of it.

When the degermination of corn first came into practice in the manufacture of hominy, starch, meal and glucose, the germ material, which contained most of the fat, was used only in feed products, but even so was of sufficient value to be the deciding factor in the economics of these processes. But now it is the almost universal practice to extract the oil from the germ, using the cake for feed.

In 1918, 111,000,000 pounds of corn oil were produced in the United States, and the demand seems to be on such a stable basis that there is little likelihood of the amount ever decreasing to a material extent, although some variation may be expected.

The interesting feature is that .532 of a pound of oil is produced from a bushel of corn by the dry process, and 1.372 pounds to the bushel by the wet process, such as is used in starch and glucose manufacture. If an average of one pound per bushel is made, it means that 111,000,000 bushels of corn are represented in the oil production. This, of course, does not represent the total corn milled or processed, as a large quantity is handled without degermination.

NEWS LETTERS

ST. LOUIS

C. M. BASKETT CORRESPONDENT

THE Missouri Agricultural Board has the following to say, regarding next summer's wheat crop, in a bulletin given out recently: "At harvest time, 1920, the Missouri outlook was for an increased acreage of wheat. 'Wheat' in Missouri always means 'winter wheat' unless otherwise indicated, for 'spring wheat' is not common in this state.

"Following on the trail of the beginning of harvest the price of wheat began dropping, and kept on going down, below the cost of production. This disheartened and discouraged many Missouri farmers, and not all the ground plowed or disced for wheat has been sown.

"The Missouri State Board of Agriculture, co-operating with the United States Department of Agriculture, has had printed 60,000 special copies of the 'Missouri Special Wheat Inquiry, 1920,' which are now being mailed to 60,000 farmers. To each farmer is also sent a franked return envelope, free of postage, for reply.

"This 'special inquiry,' addressed to practically one-half as many farmers as there are wheat growers in the state, is for the purpose of making sure of the acreage of fall seeding of wheat this year. The rye acreage is also asked. Each farmer is requested to report his average yield of wheat at the last harvest; also what his corn is turning out per acre. This wide inquiry will make the 1920 crop statistics more exact than ever before, when combined with the local assessor's report on every farm in this state.

"In considering the crop reports and farm statistics of Missouri, the business man and agriculturist should remember that these facts and figures are 'farmer-made.'"

The farmers of St. Louis County, through their organization, are planning to build a number of grain and produce elevators at various places in the county, and have five locations under consideration. Each community will finance its own elevator, some of them already having raised part of the money. It was erroneously reported several weeks ago that the elevators had already been completed, but no work has begun as yet, and the entire project is still in the plan stage.

The elevators are to be constructed of concrete, and are expected to cost from \$25,000 to \$50,000 each. It is expected that they will be operated and owned on a co-operative plan by the farmers of each community. Five delegates of the association recently left on a tour of southern Missouri, where there are elevators similar to those contemplated in St. Louis county. It is expected to gather as much information as possible for the benefit of those in charge of the planning. However, no definite plans are ready for publication.

B. E. Rothgeb, of the Department of Agriculture of Washington, D. C., spent a day in St. Louis recently in reference to investigational work being done by the Department, looking toward the eventual establishment of grading standards for grain sorghums.

The Chamber of Commerce of St. Louis is installing an exhibit of Missouri farm products, and will soon have the display ready for the public. Jasper County has shipped some of its staple farm products, such as sheaves of oats and wheat, Orchard Grass and Timothy hay, to be placed in the exhibition. An exhibit of corn will be shipped after the annual Jasper fair. Other sections are sending in their displays, and the exhibition will soon be complete.

The interest rate for purchases and consignments of grain, seeds, etc., for the month of December, 1920, has been fixed at 7 per cent.

Chas. B. Barron, Government supervisor at St. Louis, is spending a few days at Kansas City, conferring with the supervisors there regarding the grain situation.

The following interesting bulletin on grain purification has just been issued by the Missouri Department of Agriculture: "Due to an unusually large demand for carbon disulphide for grain fumigation, there is a serious shortage throughout the country, and thus in many places farmers and grain men are unable to get enough to fumigate their grain, according to the

Kansas Industrialist. Information received from several chemical houses shows that they are far behind with their orders, and can promise no deliveries for several weeks.

"While fumigation with carbon disulphide is the most effective means of destroying insects infesting grain stored in bins, there are some other methods of control. Probably the best and most practical thing to do is to pass the grain through a cleaning or fanning machine. This will remove not only a large number of the adult weevils, but also the infested kernels that contain the immature forms of the weevils. All of the weevils and infested grain removed should be burned.

"Where the grain is stored in large bins or tanks, the mere moving or shifting of the grain will help materially. This method could be used at elevators where machinery is available for shifting the grain. Some have suggested sulphur fumigation. This should not be used, because sulphur fumes have a deleterious effect on wheat, both for planting and milling purposes."

The Traffic Department of the St. Louis Merchants' Exchange is now located in its new quarters at the north end of the floor, where it is in a much better position to serve the members.

The Ralston Purina Company's new office and elevators rapidly being carried forward to completion, and hopes are entertained that it may be occupied the early part of the year.

The Merchants' Exchange is now making an effort to have the St. Louis quotations at Chicago placed in a more conspicuous position there, so that they will be more available for Chicago members.

Sydney C. Joy, of Webb & Kenward, Ltd., London, was a visitor in St. Louis recently.

A safe in the office of the William A. Miller Feed & Grain Company, St. Louis, was looted recently in a mysterious way, the loss amounting to approximately \$140. The safe was first opened by manipulation of the combination, and then damaged to make it appear that it had been forced open.

The following recently made application to the Board of Directors for membership on the Merchants' Exchange: Leonard Werthan, of Werthan Bag Company, Houston, Tex., to be transferred from Morris Werthan; and W. B. Firth, of Morton & Co., to be transferred from O. J. Wright.

The collection this year taken up at the Merchants' Exchange for the benefit of the Saturday and Sunday Hospital Association was the largest ever received. The flowers and bouquets remaining on the tables after the collectors were through were auctioned off to the members, making the total sales of flowers \$313. The returns in the boxes exceeded \$1,000, and the donations in general were very liberal.

"Missouri corn is husking 32 bushels per acre, indicating a yield of 211,808,000 bushels, or 56,000,000 more than last year," states a bulletin just issued from state headquarters, regarding farm reports received by E. A. Logan, agricultural statistician of the United States Bureau of Crop Estimates, and Jewell Mayes, secretary of the State Board of Agriculture. "Total production of the three leading grain crops for 1920 was 284,376,000 bushels, which exceeds last year and results from the increased production of corn and oats, despite the decrease of 28,000,000 bushels in wheat production.

"Missouri's 1920 corn yields 32 bushels per acre against 27 last year and the 10-year average of 26.2, indicating 211,808,000 bushels against 155,412,000 for 1919, and the 10-year average of 182,610,000. The 1920 yield has been exceeded three times during the past 10 years—in 1910, 1912 and 1917, when yields were slightly above 240,000,000 bushels.

"The frost around October decreased slightly the yield and damaged the quality of the late planted crop, but the weather of October matured practically all of the corn. The quality of 85 per cent against 82 per cent last year, and 78 per cent for a 10-year average, results somewhat from heavy winds in September blowing down much corn, and the rains of the last week in October causing rot. Chinch bugs have caused some corn to be chaffy.

"Only 4 per cent of last year's crop remains on the farms, compared to 3 per cent last year. Eighty-six per cent of the acreage is being harvested for grain, 6 per cent 'hogged off,' and 8 per cent cut for silage. The production for silage is 5.4 tons per acre, while 28 per cent has been cut for fodder. Prices for new corn are not yet stabilized,

ranging from 60 cents to \$1, with no market in many places. From October 15 to November 1, the average price declined from 90 to 80 cents per bushel.

"Wheat seeding is practically finished, except at scattering points where delayed by rains. The crop is looking well in nearly all sections, except where infested with Hessian Fly. Average weight of wheat 58 pounds per bushel against 57 last year, and 58.2 pounds for a 10-year average; oats 31½ pounds per bushel against 31 last year, a 10-year average of 30.8 pounds.

"Soil conditions are good, with fall seeding about finished and fall plowing going forward. The main work on Missouri farms today is husking and snapping the corn. Farmers are still undecided on the course to pursue with corn, cattle and hogs."

The directors of the Missouri Farmers' Association, which has a membership of approximately 70,000, held a two-day meeting on December 1 and 2 in St. Louis, to consider methods for relieving the present unfavorable economic condition of the farmer. William Hirth, a director and publisher of the *Missouri Farmer* at Columbia, Mo., stated that one of the probable features of the farmers' program will be the urging of tariff laws to prevent free importation of all grains, wool and hides. A stand is also to be taken against speculative markets in general, and other problems of the farmers of Missouri were taken up and discussed at the meeting, though no information is available at the time of writing as to any conclusions reached.

NEW YORK

C. K. TRAFTON - CORRESPONDENT

ROBERT J. KJARSGAARD, for several years connected with various grain firms in this city and at present affiliated with the Transatlantic Brokerage & Export Company, Inc., returned recently from a three-months' trip in England, Holland, Germany and Denmark. He found that in England the Grain Commission was receiving offers of wheat from all over the world. Offers in considerable volume came from Manchuria and Australia and North America also offered freely. India was expected to ship about 24,000,000 bushels and free offerings were expected from Argentina as soon as shippers there were sure of the export tax. During the several days he spent in London he was shown some of the large offers, running at high as 8,000,000 bushels daily from all over the world. He stated that the British were anxious to de-control, but until they felt sure that the trade could and would keep a sufficient flow of grain moving to meet all requirements the Government would continue in charge. Conditions were serious in Germany, but the food controllers had bought enough to meet requirements for two or three months. They had been buying at the rate of about 400,000 bushels per day, paying for it in marks. Great saving was being effected in bread consumption, although there was plenty of meat available. Many were making money quickly, but spending it as fast as made in order to avoid paying taxes. It is expected that the Food Control will be continued probably for two or three years. Denmark, he found, has enough wheat and rye for home use and the financial commission in control will not permit of importations of those grains, regarding them as unnecessary. He found Holland prosperous, everyone apparently having plenty of money and able to buy what they wanted.

Charles Rockwell, for many years a well-known figure in the local feed trade, with offices at Mt. Vernon, N. Y., who went to Chicago about five years ago and became president of the Park & Pollard Co., feed manufacturers, but is now acting as eastern representative for the J. J. Badenoeh Company, also feed manufacturers of Chicago, received a hearty welcome recently from his many old friends and associates on the New York Produce Exchange.

George E. Roden, who was active on the Produce Exchange for many years, mainly in the grain and feed trade, recently announced that he had made a new connection, becoming representative on the Exchange floor for the Kasco Mills, distributors of grain products at Waverly, N. Y.

Leonard C. Isblster, for several years associated with grain export firms in New York and other markets, recently visited his old friends on the Produce Exchange and stated that he had made a connection with the old Baltimore firm of Dennis & Co. This new arrangement was made necessary by the closing of the Baltimore office of the Bolle-Watson Company, of which he had charge for about 18 months.

The commission firm of Hughes & Dier, members of the New York Stock Exchange, the New York Produce Exchange, the Chicago Board of Trade, and other large organizations, recently issued a 16-page pamphlet entitled "Things You Should Know About the Chicago Board of Trade," written by E. S. Rollins of Chicago.

This exposition of the workings of the Board and similar bodies and of the necessity of trading in futures as a means of marketing the country's grain crops, etc., in the most economic manner is decidedly interesting and appropriate just now in view of all the agitation among farmers and their political representatives regarding the elimination of such trading facilities.

Laban A. Underwood, for many years an active grain broker on the New York Produce Exchange, latterly trading mainly for Knight & Co., recently took charge of the futures trading department of the big French grain house of L. Dreyfuss & Co.

Sam W. Thomas, for several years active in the grain distributing trade in this market, in recent years as one of the managers of the Brooklyn Elevator & Milling Company, and who left here about a year ago to become head of the Norwich Milling Company, Norwich, N. Y., visited his old friends on the Produce Exchange recently.

The following applicants were admitted to membership in the New York Produce Exchange at the last meeting of the Board of Managers: Henry E. Beardsworth of P. N. Gray & Co., Inc., importers and exporters; Edwin T. Douglass of the Eastern Grain, Mill & Elevator Corporation; Errol O. Horner of the Commercial Union of America, exporters; James A. Richardson of James Richardson & Sons, Ltd., grain merchants of Winnipeg; Earl S. Quinn of M. B. Jones & Co., grain merchants.

Lorenz G. Spindler, local distributor of flour and feed, is an applicant for membership in the Produce Exchange.

George Walter Beaven, for many years active in the local grain market, visited his many old friends on the Produce Exchange recently and was warmly welcomed. Mr. Beaven went to Chicago to become manager for Lamson Bros. & Co. He is now head of the Board of Trade office of J. S. Bache & Co. Other prominent members of the Chicago Board of Trade who were recent visitors on the Produce Exchange were: James A. Patten, Arthur S. Jackson, and John Barrett.

CINCINNATI

HARRY A. KENNY CORRESPONDENT

THE sharp decline in wheat prices in mid-November, contrary to expectations had little effect in stimulating flour prices during the middle of the month. However, especially toward the close of the month, there was an active demand for good milling wheat at the Cincinnati Hay and Grain Exchange. During early December, the demand remained active. Receipts of corn were mostly of the new crop, during the latter part of November and early in December. The commercial demand for corn was only fair. The market ruled steady throughout. The oats market was weaker speculatively, but during the early days of December became much firmer at the Cincinnati market for cash. Retailers were fair buyers of the moderate offerings in oats.

The recent heavy movement of hay to the Cincinnati market and comparatively inactive and sluggish demand was responsible for a break of \$3 a ton for Timothy and mixed. There was a marked degree of congestion, with about 200 cars of hay clogging the terminals. Shippers were advised to buy cautiously. Actuated by the congestion, B. J. Drummond, traffic manager of the Cincinnati Hay and Grain Exchange, declared on December 4, an embargo on all shipments over west and roads connecting with the Pennsylvania line to the plugging track. As a result of this embargo, selling was somewhat off, top grades going fairly well but poorer quality, and especially cars mixed with several kinds, were neglected and sold only after being heavily discounted. As a result of the embargo and lower quotations, many farmers, who under normal conditions market their hay in Cincinnati, shipped to other markets. Indianapolis was the one drawing the greater portion of the excess.

The hay warehouse and elevator interests of the J. F. Costello Grain & Hay Company, located on the Southern Railroad, in the west end of the city, have been purchased by the Bunting & Hill Company who have been making unusual strides in the local hay and grain receiving and shipping business. The new owners will make a number of improvements for the betterment of the trade it enjoys, including greater facilities for retail selling and more direct trackage to its hay warehouse.

W. E. Stone, county agricultural agent, recently forecasted a gloomy future for the wheat growers of Hamilton County and vicinity after completing a survey of those fields in which the crop was sowed before September 25. In 90 per cent of the fields the crop had become infested with the Hessian fly. The fly was in the flax-seed stage and will stay with the crops through

the winter. Following the investigation, the county agent predicted that the bugs will ruin thousands of bushels here next spring, in spreading to fields foreign to those in which they have already settled. In their present stage the insects are capable of doing unlimited damage, Mr. Smith said, because they will survive the ravages of winter.

In wheat sowed on October 4 or later, the infestation is less than 10 per cent. This is not considered dangerous as when cold weather arrives the bugs will likely be frozen.

The recent drop in wheat in this market was reflected in an interesting way when wholesale bakers, supplying half of Cincinnati's population, announced a 10 per cent reduction in the price of bread on December 1. The cut in prices was directly occasioned by a drop in the flour market. In announcing the cut, officials of the Banner and Schultze Baking Companies and the National Biscuit Company said that in the future they would operate entirely on a sliding scale basis, with the market price of wheat regulating increases and reductions. Heretofore this method of operation has not been rigidly enforced.

Interesting reports regarding activities in the milling and grain world were furnished local dealers during the month. According to a bulletin of the Ohio State University, although there are fewer farms in Ohio now than 10 years ago, the grain productions per man have been materially increased.

W. L. Ingles, Cincinnati director of Federal Grain Supervision, recently compiled a report on wheat receipts here during the months of July, August and September, for the years 1918, 1919 and 1920, with percentages of cars grading No. 1, to sample, percentages of weight, moisture and damaged grains, and the percentages of the various factors of weevil, smut, garlic and dockage contained in the cars.

Cincinnati grain shippers were notified on November 28 to route their shipments via Pennsylvania lines to this city, according to instructions from the Grain and Hay Exchange. The action was taken to preserve full switching privileges at the destination of the consignments here.

About 20 members of the Cincinnati Grain and Hay Exchange are planning to attend the annual corn show at Shelbyville, Ky., on December 30. A. S. Chapin, poultry expert of the University of Kentucky, will deliver the principal address at the sessions previous to the exhibition.

The Court of Appeals here rendered a verdict which will effect, to a marked degree, activities among market men in this vicinity. The ruling, in the case of William G. Scarlett & Co. against Clarence Roudeshush, Harrison, Ohio, farmer, granted the plaintiff \$1,241 for a broken contract calling for the delivery of a large quantity of soy beans, which it could have sold for a larger figure than the contract price. The decree follows: "In case of a breach of contract by the seller, when there is an available market for the goods in question, the measure of damages, in the absence of special circumstances, is the difference between the contract price and the market or current price of the goods at the time when they ought to have been delivered."

Cincinnati Hay and Grain Exchange lost the services of a valuable attache recently when Miss Ursula Patterson, secretary, daughter of Lawrence Patterson, of Covington, Ky., was married to John M. Hackman, World War veteran, at Dayton, Ohio. The couple will reside at Los Angeles, Calif.

After a week's business trip to the South, Fred Winkler of the hay department of the Mutual Commission Company, is again attending the plugging track sales.

W. R. McQuillan of McQuillan & Currus returned late last month from a visit at Mt. Clemens, Mich., where he enjoyed a short vacation.

During October, a decline of 19 per cent in farm prices was recorded in Ohio according to Crop Reporting Station of the state.

B. H. Wess, treasurer of the Grain and Hay Exchange and president of the B. H. Wess Hay & Grain Company suffered the loss of his wife on Friday November 19 after a prolonged illness. Condolences are extended to Mr. Wess by hay and grain merchants of this locality. Besides her husband, three daughters and three sons survive her.

H. E. Richter, L. B. Moser, F. B. Edmunds, F. L. Watkins, Henry M. Brouse, and John Kontz, representatives of the Cincinnati Hay and Grain Exchange, attended last week a formal hearing for the adjustment of the Indiana intrastate rates on grain and grain products, to conform with the Interstate rates, which was held before Examiner Disque, of the Interstate Commerce Commission, at Indianapolis. The purpose of the hearing was to receive the application of the railroads for an increase in commodity rates in the state of Indiana, to comply with the Interstate Com-

merce Commission award of 40 per cent on interstate movements. Mr. Richter, who was chairman of the local delegation, stated that it is apparent that inasmuch as the Commission recognized the discrimination it will order the Public Service Commission of Indiana to increase its rate on grain.

J. F. Costello, who has not enjoyed the best of health for some time, and who has been obliged to relinquish active management of his extensive hay warehouse and elevator interests, has established himself in the hay and grain commission business with offices in the Thoma Building, Fifth and Main Streets. These quarters were formerly occupied by the Bunting & Hill Company.

Stockholders in the Farmers' Grain & Supply Company, at Camden, Ohio, at a meeting last month, adopted a resolution to change the business from a stock company to a co-operative company. The company was organized in 1910 by farmers in Preble County and a large grain elevator was built. Officers of the company are: President, S. E. Schellenberger; secretary, W. B. Cline; manager, Joseph F. Becker.

Corn growers of Henderson, Ky., a short distance from Cincinnati across the Ohio River are refusing to pay last year's price of 10 cents a bushel for corn husking, claiming the market then was \$1.50 a bushel for corn as against 65 cents a bushel now and the growers are offering only seven cents a bushel.

John Herron, assistant superintendent at the plant of the Ubiko Milling Company, Carthage, was suffocated when a feed bin on which he was standing collapsed and buried him beneath the contents.

INDIANAPOLIS

EARL BULLOCK - CORRESPONDENT

THE present manager of the Raub Grain Company, operating an elevator at Raub, in Benton County, Ind., has been appointed receiver for that company. A few months ago a shortage of approximately \$75,000 was reported shortly after the disappearance of Lee Kelley, who had been acting as manager, and who later returned and insisted that the missing money had been used in legitimate speculation for the company. Efforts are being made to collect \$40,000 which Chicago firms insist is due them from the Raub concern but the company refuses their demands as they state it represents money lost in speculation by Kelley which was not authorized by their company.

Investigation is under way for the alleged wholesale theft of flour from the Union Grain Company and the police have taken into custody two well-known men, Moses Weeks and Arthur Retz. The police assert that a confession has been made by Weeks, and according to this alleged confession Weeks stated that he placed flour in his truck to make deliveries for the company and in addition would take enough for his own deliveries. It is alleged that Retz planned the thefts and shared in the profits. As a result of the alleged admission by Weeks that some of his customers knew they were buying stolen flour, other arrests may follow.

The Paul Kuhn Company, Terre Haute, Ind., has decided to tear down the ruins of the Indiana Milling Company plant, recently wrecked by fire, and this line, the production of mixed feeds, will be abandoned by the company. The walls of the burned mill are still standing at Seventeenth and Maple Avenue.

Mystery surrounds the robbery of the safe of the Farmers Co-operative Grain and Supply Company at Crawfordsville, December 3. The theft was discovered when the office manager reported for work. It was found that the robber had burned the company's books and had taken about \$45 in money from the safe. The company was organized about a year ago.

The D. G. McFadden Grain Company, in Randolph County, has changed its name to the Ridgeville Grain Company.

The Farmers Elevator Company, of South Wataha, has filed a preliminary certificate of dissolution.

Funeral services were held at 10 A. M., November 29, for Jesse Warrington at his home at 271 North Randolph Street. Mr. Warrington was formerly chief engineer and mechanical superintendent for the Nordyke & Marmon Company, and was 74 years old. He was born in Mahoning County, Ohio, and for a time was employed by the Buckeye Engine Works of Salem, Ohio. He came to Indianapolis 40 years ago and until his retirement in 1910 has always been connected with the Nordyke & Marmon Company. Mr. Warrington is credited with inventing and improving mill

machinery in connection with the roller process for the manufacture of flour, and also assisted in perfecting the automobiles constructed by the Marmon Company. He was a member of the American Society of Mechanical Engineers. Burial was in Crown Hill and the pall-bearers were Walter C. Marmon, Howard C. Marmon, Harry C. Moore, Max Tones, Robert Roberts and Carl Bright. Mr. Warrington is survived by two daughters, Mrs. J. K. Bain of Detroit, Mich., and Miss Florence E. Warrington, of Indianapolis, and two brothers, David Warrington, of Jacksonville, and Charles Warrington, of Indianapolis.

MILWAUKEE

C. O. SKINROOD - CORRESPONDENT

THE big topic of grain men at Milwaukee is when will the grain supplies of the country loosen up and come to market in larger volume. Right in the season when grain trade should normally be at the maximum, very restricted receipts are the rule for the most part.

In the first week of December, the trade appears to be more limited than ever with receipts at this market of 515 cars compared with 705 cars in the previous week, 543 cars a year ago and 1,355 cars for the corresponding week of 1918.

This indicates that grain trade fell off 200 cars in a single week. It is even below the low level of grain offerings a year ago when grain selling was at the lowest fall ebb for years. The real situation is compared with 1918, when grain trade was nearly three times as large as it is now.

One grain man of Milwaukee declared that just a little higher prices would probably stimulate grain receipts. He asserted that farmers have seen grain values going lower and lower almost every week and that the attitude has been that the grain trade might as well be allowed to hit bottom and rally until grain sales are started again in full volume. This is apparently the attitude of some farmers, according to leading grain dealers here at this time.

Has the farmer at this time any right to hold his grain? This is a question frequently asked. Many declare that the farmer has the undoubted right to hold his grain as long as he is able, if he thinks that he will thereby gain an advantage. His right, it is said, is as valid as the right of any business man to make the best deal possible, by selling or waiting for better returns, if he is disposed, provided, he is not crippling the banks and making unjust demands for credit when banks are badly tied up. The argument, in other words, is, that the farmer can hold the grain if he does not damage any other interest in the community by his play of the holding game.

A comparison with the prices of grain a year ago are especially illuminating now when the discussion of grain men and farmers is so largely of price conditions. This comparison shows that No. 2 rye at \$1.59 to \$1.62 at this writing compares with \$1.64 a year ago. The price of rye is therefore just a shade less than a year ago.

On the other hand, barley is selling around \$1.02 to \$1.03 for the No. 3 which compares with \$1.61 to \$1.63 for the corresponding day a year ago. The decline is about one third under last year's prices.

No. 3 White oats at 50 to 52 cents compares with 80 to 83 cents a year ago. The market is about 40 per cent under last year according to these figures.

No. 3 Yellow corn has sold at 82 cents a bushel now compared with \$1.43 to \$1.44 a year ago. The market has therefore declined between 40 to 50 per cent.

No. 1 Northern wheat has been selling at \$1.80 to \$1.85 as compared with \$3.20 to \$3.25 for the corresponding time a year ago. Wheat has also gone down between 40 and 50 per cent since last year.

Practically all the grains have declined from 33 to 50 per cent since last year, except rye which is practically the same as for 1919. This indicates an extraordinary demand for rye at this time as compared with last year, judged by the way the price has been sustained at high levels.

The Milwaukee Transportation Department, under the management of J. L. Bowlus, recent incumbent, reports that the minimum carload weight of grain shipments has been fixed at 50,000 pounds by the Interstate Commerce Commission. This rule is effective January 1 and displaces the old war-time regulation which required "capacity loading" of freight cars.

One report of the rye market emphasizes the extremely large export demand as being responsible largely for the extraordinary prices lately.

Milwaukee grain men have been notified that insurance on lake cargoes advanced to 1 per cent from December 1 to December 5. From December 5 to December 8 the rate raised to 1½ per cent. For December 9 and December 10 the rate was 1½ per cent. For the two following days which marks the close of

navigation, the rate was 2 per cent. Hull insurance advanced three-fourths of 1 per cent on December 1 and from that date to December 12 gradually rose to 1½ per cent at the latter date.

The Milwaukee flour stocks at the opening of the month of December were 18,000 barrels in round numbers as compared with about 18,000 barrels for the first of November, 45,000 barrels a year ago, 45,000 barrels two years ago and 12,000 barrels three years ago. The flour supply is about 40 per cent of the normal supply for the last two years.

The December rate of interest on advances has been fixed by the Finance Committee of the Chamber of Commerce at 8 per cent. This indicates that the rate for money is as high as ever despite the talk of easing rates in the last few days.

The Chamber of Commerce will have a share in the plans being made by leading Milwaukee organizations to celebrate the seventy-fifth anniversary of the incorporation of the city January 30. It is expected that an entire week will be given to some sort of city-wide festival.

Efforts are being made to advertise the importance of Milwaukee with regard to its grain and flour industries, through means of the city press, pamphlets, Association of Commerce, letters, and other methods of systematic publicity. It is believed that the high standing of Milwaukee's grain and milling industries is often overlooked.

Attention is called by way of summary to the fact that the city has more than 40 firms which receive and sell grains, seeds hay, etc., on consignment. It has storage and elevator capacity of about 20,000,000 bushels. The milling industry consists of three mills with a combined capacity of 5,420 barrels of rye and wheat flour per day. The city also has two oat meal mills with a capacity of about 1,900 barrels per day. Milwaukee also has two corn products mills which require over 4,000,000 bushels of corn annually to keep running at full capacity. The city also has a linseed oil mill which absorbs the flax seed receipts here which total something like 300,000 bushels annually.

The reports of the Chamber of Commerce indicate that in the last eleven months, ending December 1, it has been found that 31 per cent of cars received leaked. The percentage of leakage by months for 1920 is as follows beginning with January: 28, 28, 23, 26, 31, 37, 36, 33, 32, 31, 26. The only encouraging thing about the report is the fact that leakage was cut to 26 per cent of cars for November. This is near the low record and gives hope for a still better record for the month of December.

At this writing two shiploads of wheat for the season have come from Fort William, Canada, to Milwaukee. The total carried was about 350,000 bushels. The *Winona* brought 115,000 bushels of wheat on October 18 and the *Penobscot* brought 235,000 bushels November 22. The movement of Canadian wheat to Milwaukee is not of large proportions.

Grain men from 55 Wisconsin counties are making plans for an extensive exhibit of best grains at La Crosse January 26 to January 29. The Wisconsin College of Agriculture and the Wisconsin Experiment Association will co-operate in staging the big show. The Experiment Association with more than 2,000 members will hold its annual conference during the show. The La Crosse Chamber of Commerce will also put on its mid-winter carnival during the exhibition.

Grain in store in Milwaukee at the close of business December 4, 1920, shows 254,000 bushels of wheat in round numbers; 100,000 bushels of corn; 1,288,000 bushels of oats; 129,000 bushels of barley, and 105,000 bushels of rye. These figures indicate that grain stocks are very small with the possible exception of oats, where a fair supply is held.

An excellent demand for corn is reported at Milwaukee both for industries and for shippers. The quality of the new crop corn is reported exceptionally good, and most of the receipts are now of the new crop.

F. G. Crosby, a Milwaukee shipping man, has inaugurated a new boat line from Miami, to Havana, Cuba. The concern is known as the Havana-American Steamship Company. Mr. Crosby is president of the firm, W. F. Drohan of Milwaukee is general manager, W. P. Smith is secretary and C. A. Kaidel of Milwaukee is treasurer.

Active plans are being made for financing the big shipping project of a carferry line between Milwaukee and Muskegon, Mich. One of the members of the financing committee is Harry M. Stratton, president of the Milwaukee Chamber of Commerce. Shippers declare that the new carferry project is exceedingly important because it virtually brings the New York Central and Pennsylvania roads into the city. It is proposed to get the plan going if possible so that shippers can get the benefit of it by next spring.

It is proposed to build a \$2,330,000 warehouse at the

foot of Twelfth Street on the Petit Salt Company docks. The entire project, including steamers and car ferries, would cost just a little less than \$5,000,000. The present plan calls for the organization of a separate company to build the docks and warehouse. Muskegon business men have been pushing the project for months by means of delegations sent to this city. Many Milwaukee shippers and business men are interested and if the terminal can be built here as stated, the plan will be a go. It is believed that the new carferry will be immensely important to the grain interests of the city in giving a direct outlet to the east which does not exist at the present time.

Figures given by the Wisconsin state marketing division prove that farm prices on grain in this state are by no means as low as general reports would indicate. The farm price of wheat dropped from an average for October of \$1.95 to an average for November of \$1.75. The average price of barley dropped from 93.7 cents for October to 89.3 cents for November. The average price of oats paid on the farm dropped from 55 cents in October to 51.9 cents in November. The average price of corn on the farm dropped from \$1.14 in October to 94.7 cents in November. The latest declines in grain are, of course, not reflected in farm prices paid in November. But the figures illustrate the small spread between farm prices for grain and the price paid on the grain exchanges.

Reports received at Milwaukee from officials of the Chicago, Milwaukee & St. Paul road indicate that the November loadings of the road were 107,000 cars in round numbers compared with 116,000 cars loaded for the same month of 1919. Cars received from connections totalled 37,000 against 36,000 received last year for the same month and 30,000 two years ago. Not only did general traffic fall off, but the grain loadings for last month were a little more than 7,000 cars, compared with more than 9,000 cars a year ago and over 10,000 cars for the same month two years ago. Grain loading is therefore about one-fourth less than last year and about 50 per cent under the number of cars two years ago. This is the most eloquent testimony yet given of the extent of the falling of the grain movement in the Northwest due to the holding of the farmers for higher prices.

Milwaukee interests are going to make a very determined fight for a favorable report on the St. Lawrence deep waterway route at the meeting of the Rivers and Harbor Congress in Washington this month. Phil A. Grau, business manager of the Association of Commerce, reports that a strong delegation will be sent from this city to see that a favorable stand is taken on the project. President Cornelius Corcoran of the common council; J. J. Blommer, traffic secretary of the Association of Commerce; George E. Ballhorn, general counsel of the Association of Commerce, and C. A. Lamoreaux of Ashland, who represents Wisconsin Deep Water Ways Commission are among delegates chosen. The Wisconsin delegation, and the representatives from other western states, have a report that the eastern members of the Rivers and Harbors Congress are out to get an adverse report on the new St. Lawrence route. The West determined to see that the new waterway is built at the earliest moment possible.

The chief of the United States army engineers, Major Lansing R. Beach, has recommended an appropriation by congress of \$4,000,000 for the improvement of the outer Milwaukee harbor. An initial appropriation of \$1,000,000 for the year would be conditional on submission of evidence by the city that it is prepared to finance and carry out its plan for inner harbor improvement.

The sale of the Goodrich fleet of steamers to H. W. Thorp aroused great interest in shipping circles in Milwaukee, especially the statement that the fleet is to be expanded under the new management. The new corporation has a capital at the start of \$1,250,000 and it is proposed to add to this capital stock from time to time as it becomes necessary. Associated with Mr. Thorp in the enterprise are interests connected with the Manitowoc Ship Building Corporation. The new concern has a number of ships and docks in about a dozen cities.

Secretary H. A. Plumb says in his annual report just prepared that the big feature of the grain trade in the past year was the withdrawal of the Government from its supervision of the grain markets. - He states that the trading in wheat futures was again started by the grain exchanges with much misgiving. The results have been just what was expected, that chaotic world conditions would drive down grain prices and the exchanges would be placed in a bad light as the farmers charge manipulation of values, and assert that they are deprived of the proper return for their labors.

This dissatisfaction of the farmers has been so deep seated and widespread, Mr. Plumb points out, that it has lead to a movement to hold the grain in the country. This, he says, is just a plain business policy and the farmer has a right to hold for the best price possible. On the other hand, he objects to the farmers blaming the terminal market dealers for the big slump in grain.

Mr. Plumb then shows that for 1920, with the month

of December estimated, grain receipts here were 56,530,000 bushels, as compared with 69,084,000 bushels a year ago. The 56,000,000 bushels of receipts at Milwaukee are made up of about 3,600,000 bushels of wheat, 15,150,000 bushels corn, 24,000,000 bushels oats, 8,500,000 bushels of barley and 4,600,000 bushels of rye.

Some rather striking changes Mr. Plumb shows have come into the grain trade, the wheat receipts here dropping from 8,000,000 bushels in 1919 to 3,000,000 bushels in 1920. Corn, on the other hand, increased from 8,000,000 to 15,000,000 bushels, indicating the growing popularity of the city as a corn selling market. Oats trade dropped from 28,000,000 bushels last year to 24,000,000 bushels this year. Barley had the enormous decline from 19,000,000 bushels in 1919 to 8,000,000 bushels for 1920, while rye trade was about the same for the two years, around 4,500,000 bushels. The drop in barley receipts as well as the great gain in corn trade, are the most striking items in Milwaukee grain trade for the past year.

Mr. Plumb brings the figures down to date in taking receipts of grain here on the new crop year, since September 1. Taking these four months, the last of each year, grain receipts in 1920 for the period were 20,000,000 bushels as compared with 24,000,000 bushels a year ago. This, he says, is due to farmers holding back grain, to the fact that eastern grain buyers were uncertain, and due also to the lack of cars. Eastern grain buyers, said Mr. Plumb, have not bought as much feedstuffs as formerly, as the fall was marked by mild weather and less feed was needed.

In conclusion Mr. Plumb finds that Milwaukee is a more popular grain market than ever before and that lack of receipts is due to the same influences which reduced grain receipts at other points. He mentions the fact that the demand for grain is always strong here, that 3,500,000 bushels of wheat are required per annum just for the manufacturing industries; that 1,500,000 bushels of rye are needed, 8,000,000 bushels of oats per annum and over 4,000,000 bushels of corn are required yearly. He points out further that about half the grain received here is shipped out, of which one-half again is exported. He closes with the belief that in a few years Milwaukee will surely be a seaport town so that the vast grain trade can be carried on direct with Europe.

DULUTH

S. J. SCHULTE - - CORRESPONDENT

THE season of lake navigation here was definitely closed down on December 12. The closing lacked the activity of other fall seasons when there were large tonnages of wheat to be moved. So small were the stocks in store this fall that during the 10 days before the season closed several steamers were compelled to clear light for Fort William and Port Arthur to load grain. With the exception of oats and flaxseed, supplies in the elevators were practically cleaned out when the last steamer cleared, and she was held for two days to enable sufficient stocks of Durum to accumulate to enable her to complete her load. Approximately 2,250,000 bushels of oats and 1,200,000 bushels of flaxseed remained in store. The boat rate for Buffalo delivery for loading up to December 12 stood at five cents a bushel and that included winter storage at the lower end of the run, if desired. At the opening of the fall season, the rate stood at seven cents.

The Hallett & Carey Company has taken up more commodious offices on the fourth floor of the Board of Trade Building. That company has handled more than 4,000,000 bushels of Canadian wheat on this market this season, bringing it over by boat from Fort William and then reshipping it to Minneapolis millers. The spread between the Winnipeg and the Duluth and Minneapolis markets is said to have enabled the handling of that trade on a profitable basis.

Horace Jackson of Jackson Brothers, Chicago, was given a warm reception by his friends on the Duluth market when he visited it recently on his way upon a hunting trip in the northern woods of Minnesota. It was recalled that it was just four years ago since Mr. Jackson came within an ace of coming to his end through being lost while hunting in the Lake Vermillion district, and the traders here admired him for his temerity in again tackling the hunting game. When on the trading floor here last Mr. Jackson proved his good market judgment in advising short sales in coarse grains at the then going quotations. He said he could see about 10 cents profit in a short trade in oats at Chicago, and his prediction was about realized before the market finally straightened itself out.

The bears cut high jinks in the flaxseed market here during the last month. The quotation in the December future broke all the way down to \$1.80, slumping 26 cents in one day, largely on the catching of stop-loss orders. Numbers of country holders, some of whom had carried their trades down from \$5 were

declared to have been compelled to let go. Support came on the low levels in the seed, and recoveries extending to 40 and 45 cents were staged. Some of the specialists in that market take the position that flaxseed is selling far out of line with wheat. They argue that should the wheat market become stabilized at say around \$1.50, flaxseed should range at a \$1 over. Shipments of flaxseed from the elevators here to Buffalo and Toledo were light during the fall, aggregating around 1,400,000 bushels. About 800,000 bushels of seed was shipped from the Canadian Head of the Lakes.

Operators at Duluth were interested in recent reports from Winnipeg that the farmers of Western Canada are contemplating taking up the raising of Durum wheat in the dry sections of Alberta and Saskatchewan. It is remembered by Duluth grain trade interests that Julius H. Barnes and other grain men here who plugged for the raising of Durum at the start in Minnesota and North Dakota, were regarded as venturesome. Their confidence has since been proven to have been fully justified in the results attained in growing Durum wheat. It is regarded as interesting that Durum at times this fall commanded a premium of 10 cents over Spring wheat, while in other seasons it has sold at discounts of around 15 cents. The bulk of the market operations in wheat on the Duluth market this season were in Durum, which was in demand by Eastern millers for macaroni flour making. A good quantity of Durum was also sold for export from this market.

In the course of a recent talk to Duluth grain men, Julius H. Barnes asserted that 71 per cent of the grain in Winter wheat territory has been already marketed at prices that compared favorably with those received last year. Farmers holding the remaining 29 per cent of the wheat do not deserve much sympathy in his opinion, for the reason that they refused to sell with the idea in their minds of holding back for \$2.75 or \$3 a bushel. In Mr. Barnes' view, the passing of any measures at Washington to afford the farmers relief would be in the nature of class legislation and discriminatory. As he sees it they could not reasonably expect to continue to receive war prices for their products, while the markets in other commodities are in the process of readjustment downwards.

The opening of trading in the May wheat future is expected to afford a broader market and to promote trading on the exchanges. It is remembered with interest that the initial trades in December wheat and Durum here were recorded at \$2.75 a bushel when trading was resumed on July 15 last. The extent of the break that has come since is illustrated in a current price of around \$1.59 for December.

W. O. Faulk, representative of C. C. Wyman & Co., on this market, received the congratulations of a wide circle of personal and trade friends on the occasion of his marriage last week. This is Mr. Faulk's second marriage. His son, Frank Faulk, is manager of the Becher-Barrett-Lockerby Company's office here.

Duluth elevator and grain interests are looking forward to a steady movement of grain to the market here during the winter months, and they are sanguine that the houses will gradually fill up between now and next spring. A substantial quantity of wheat is expected to be put into the elevators under storage by farmers with the intention of marketing at what they may regard as favorable prices.

Officials of the Consolidated Elevator Company at Duluth take the credit for having loaded out the last lot of grain for the season. The steamer *G. G. Barnum* took 100,000 bushels of mixed Durum from their Elevator E on December 12. As showing how closely the elevators were cleaned up on wheat, it may be mentioned that the steamer was compelled to call at four elevators to complete her cargo.

R. M. White, of the White Grain Company, asserted that while the outlook for the trade in feeds is good, the demand has been slow locally on account of woods operations in northern Minnesota having been held up through warm weather conditions. For that reason lumbermen have been compelled to defer putting in their winter camps. Absolutely no demand has come from the East for oats this season, and consequently stocks aggregating 2,250,000 bushels have accumulated in the elevators. Mr. White asserted that hay has been selling lately at the lowest basis in more than four years, good Midland being offered down at as low as \$10 a ton.

Rye prices veered around like a weathercock during the last month, being influenced by the extent of the export inquiry from time to time. The net result was a decline of 13 cents from \$1.56 for spot down to \$1.43. The movement of rye on this market during the present crop year from August 1 last to December 10 aggregated 9,210,931 bushels as compared with 6,838,918 bushels during the same period last year. The movement of all grains for the new crop year to December 10 to elevators here aggregated 49,397,007 bushels, against 21,272,094 bushels up to

the same period last year. Wheat receipts were 32,271,263 bushels, against 11,400,376 bushels last year. Of the wheat movement Durum accounted for 20,059,349 bushels, against 4,696,032 bushels up to the same period in 1919.

KANSAS CITY

B. S. BROWN - - CORRESPONDENT

THE money situation as it affects the grain trade has not grown any worse in this territory the past few weeks, some of the larger grain dealers and officials of the Board of Trade assert. There have been numerous bank failures in the Northwest and in general the credit situation is acute, but it has not greatly upset the grain trade, despite the fact that liquidation and price declines have been extreme. The grain trade, it was said, has probably withstood deflation from war time levels with smaller losses than any other line of industry. At Kansas City only a few scattered losses have been reported recently, none of which threatened the stability of the firms involved. Unusual caution naturally is characterizing all transactions.

A bet of \$2,000 was recently made at the Kansas City Board of Trade that March wheat would sell at \$2 on the local market before the option expired. The market was close to \$1.60 when the bet was made.

The car situation in the Southwest has shown decided improvement the past few weeks and at present there are practically no complaints of a shortage. This may be due in part to the general slowing up of business that is being experienced everywhere, but it is generally thought it represents an actual improvement in transportation service. The president of the Union Pacific reported recently that the shortage on their line had been entirely relieved and that the company was now storing cars. Definite figures for comparison are not available, but elevator operators and other shippers generally indicate that the situation is the most favorable in several years. The main difficulty now is with the poor condition of most of the cars.

An unusually large proportion of the Oklahoma wheat crop is still on farms, according to a recent investigation by the Simonds-Shields-Lonsdale Grain Company. On November 15 it was estimated that fully 50 per cent was still in the hands of producers.

Wheat receipts at Kansas City in November were fairly liberal, exceeding the October arrivals by 13 per cent and the 10-year average by 38 per cent. Improvement in the car situation was chiefly responsible for the sustained movement. The total was 5,562 cars, compared with 4,939 cars the preceding month, 6,455 cars a year ago and an average of 4,021 cars. Much continued to be said regarding the attitude of farmers and their willingness to sell. The so-called "strike," regarding which so much was said a month ago, at no time appeared to be a factor. There was much dissatisfaction with prices, but there was no evidence that farmers were deliberately refraining from selling, at least there were not enough in the movement to affect arrivals at the principal markets. Elevator stocks are the largest of the season, 2,864,000 bushels, though only one-fifth as large as a year ago.

After having been in effect several weeks, the embargo against shipments of grain to Galveston was lifted the middle of November. Practically no permits were issued while it was in effect and export trade was greatly handicapped. Scarcity of ships to load export wheat caused the embargo.

Alfred Huttig of the Norris Grain Company has been elected a member of the Kansas City Board of Trade on transfer from David H. Kresky.

The first important shipment of new corn was received at Kansas City, November 22, when about 80 cars arrived. The grain came from a wide territory, which included Kansas, Nebraska, Oklahoma, Missouri and Iowa. Quality was uniformly good.

George S. Carkener and George H. Davis represented the Kansas City Board of Trade at the last meeting of the Committee of Sixteen in Chicago when it was decided to start trade in May wheat December 15, subject to the approval of the various exchanges.

It is not thought that any of the various plans to extend aid to farmers, advocated by several Government officials and bureaus, will be given serious consideration, though much is being said of them at present. The attitude of farmers in seeking credit extension and a broader export market, all of which constitute an artificial means of keeping prices up, is readily understood. The declining prices have naturally resulted in much dissatisfaction and the farmer feels that the Government should continue its war-time policy of favoring agricultural enterprises. The general belief.

however, is that no one line of industry is to be so favored and that all are to submit to the inconveniences and losses of deflation. This is the view expressed by numerous grain men at Kansas City.

Exporters who were long on wheat at Chicago have recently transferred part of their accounts to Kansas City, which explains the readjustment in prices between the two markets, according to trade reports. A desire to obtain delivery of Hard Winter instead of low grade Spring prompted the change, it was said.

The condition of Winter wheat in Kansas and practically all parts of the Southwest is reported good to excellent. The supply of moisture as a rule has been ample and germination has been a little above the average.

Criticism of grain exchanges and future trading in particular has become more bitter in the Southwest the past three weeks. As has been the case all season it comes chiefly from farmers' organizations and from individual millers. The big majority of grain men and a large portion of millers and a few of the farmers' organizations have defended the present system of marketing grain and are convinced that no change will be made. Efforts of Senator Capper of Kansas to have prohibitive tax placed on future transactions are watched with interest, though it is not thought he will be successful.

Initial deliveries on December contracts at Kansas City were 55,000 bushels of corn. It was expected some wheat would be delivered as the cash market had been close to the option the latter part of November, but a difference of several cents was maintained the first week in December and none was offered. Red wheat, which has been scarce, is far above a delivery basis.

The transportation department of the Board of Trade has issued a bulletin entitled "The Kansas City Board of Trade Grain Tariff No. 1-A," which contains rates on wheat and corn from stations in Kansas, Nebraska, Oklahoma, and from Missouri River points, proportional rates from St. Louis and Chicago to the Atlantic seaboard territory and east of the Indiana-Illinois state line, and also to Atlantic ports, upon domestic and export traffic.

Canadian flour has been offered repeatedly in Kansas City territory at slightly lower than local prices, but has met with practically no demand as all buyers prefer the advertised brands of Southwestern mills. There have been no reports of offerings of Canadian wheat at Kansas City, but some was received at St. Louis two weeks ago. Canadian prices are no longer under the domestic basis which has brought much relief to sellers in the Southwest.

LOUISVILLE

A. W. WILLIAMS - CORRESPONDENT

BUSINESS with the Louisville elevator and grain trade continues very quiet as a whole, there being very little movement with the markets so unsettled as they are at the present time. For several days the retailers and jobbers were worrying with a declining market, which resulted in jobbers taking losses on almost every car received before it arrived. Now that prices are a little steadier and holding more firmly the situation is a little more promising, but the bears are still at it, and there isn't much confidence in the markets.

This condition has made it especially hard on the elevator men, as there is no buying or storage of grain in any quantities. Such grain as has been stored this season has represented a loss to the owners on almost every occasion. There have been some fair sized losses on oats held locally, and heavier losses on corn held elsewhere. There hasn't been any rye handled through here to speak of on the crop year. Wheat handlings have been very small. Shipments have come in and gone right out again, but there hasn't been much wheat in storage either in private or public elevators.

Louisville grain interests have been holding several meetings at the Board of Trade in regard to the intrastate rates in effect on railroads in Indiana, which are working a hardship on the Kentucky, Illinois, and Ohio grain centers, which can't secure business moving into Indiana points on a competitive basis, the interstate rates being about 30 per cent over intrastate rates.

In the corn markets it has been quite noticeable that the corn millers haven't been buying freely, which has resulted in White milling corn being below Yellow corn, and on a par with mixed. Corn millers are running 16 hours a day and better, many running full time, as a result of increased demand in the South, where with general depression as a result of

dull lumber, cotton, tobacco and other movements, the consumer is being forced to economize. However, corn millers are buying only old and kiln dried corn, and apparently have been working out stocks bought some time ago.

There is very dull movement of new corn so far. There hasn't been any large carlot movements reported through Louisville so far, although they are coming better as a result of scarcity of old corn. Farmers are much wrought up over offers of 65 to 70 cents a bushel for corn, and argue that a dozen eggs sells for more money than a bushel of corn. Some farmers are threatening to go into the poultry business, stating that they can feed corn more profitably to chickens. Feeding hogs hasn't proven especially satisfactory either, due to the weak livestock markets.

Millers have been bumped so often on the crop year that they have quit buying wheat except for immediate use, in comparatively small quantities. The milling trade has been bullish most of the season, but of late there have been a few bears developed by the force of circumstances, and today there are comparatively few millers in this section who are willing to discuss the wheat market, as a result of having made so many false predictions.

One miller in discussing the wheat situation recently said: "We lost money on the first half of the crop year. We were on the wrong side of the market every time we bought a lot of wheat. We had bad breaks after buying two big lots of wheat, and have been milling high priced wheat all season. However, we figure that we will come back on the last six months of the year, and make up our losses."

He declined to state reasons why he figured on making up losses in the last half. The question is has he wheat purchased on futures, and figures a high market? Some wheat men can't see much possibility of a high market, arguing that with the present depression, people out of work, and wages falling, the demand will slump, and prices can't and won't be paid for wheat. Other wheat men figure that there is quite a trimming coming to December shorts this month, and argue that the export demand and future needs of millers will force the price.

Hay has been in very fair demand, but has been forced lower by the weak grain markets, and fact that offerings are better now than cars are in full supply, and time is hanging heavy on the farmer's hands. There is plenty of hay in the country, and it is just a question of moving it in. Country demand is light through the South as a result of most sections having fair supplies. Prices of hay are off somewhat, and expected to go lower.

Principal hay quotations show No. 1 haled Timothy, \$28 a ton; No. 2, \$27; Mixed, No. 1, \$26; No. 2, \$24; Clover, No. 1, \$29; No. 2, \$26; straw, wheat and oat, \$16.50; rye, \$19. These prices are \$2 to \$4 a ton lower than three weeks ago. Straw is very scarce due to demand from paper mills, and short supply to start with, but offerings are now a little better.

New corn is running 18 to 24 per cent moisture content, which is resulting in considerably dry kiln operation, which is giving the elevator operator a little revenue. After taking out moisture down to 14 to 15 per cent kiln dried is quoted at 82 cents for No. 2 White; 85 for Yellow; 83½ for Mixed; Natural White corn, No. 2, 78 cents; Yellow, 80 cents; mixed, 79 cents. Old corn is selling at 5 to 6 cents a bushel over White, where it can be had, it now being very scarce. Oats are in dull movement, No. 2, White, 57 cents; Mixed, 56 cents; No. 3, White, 56½ cents.

Feed is weaker in price due to cheap grain and better feed production. Bran is being jobbed at \$35 a ton, sacked; mixed feed, \$37; middlings, \$36; hominy feed, \$37. Other lines are comparatively prices. Manufactured feeds have not been as good as mill feeds.

The fact that No. 2, Red Soft Winter wheat is selling at a considerable premium here over Spring wheat has resulted in a good deal of blending of Spring and Hard Winter wheat with Soft Winter this year in the Southern mills. It is reported that Southeastern mills are running about 40 per cent of capacity.

A good deal of discussion has been printed concerning attitude of farmers and county agents in regard to planting heavy crops next season, farmers talking about growing more hay, and lines which require less labor, but probably doing about as they always do on the show down.

The Kentucky Public Elevator Company reports dull business as a whole, but with some slight improvement in new corn movements, and better prospects.

Edinger & Co. report that business is dull, movement being slow and in small lots throughout, there being no snap to the demand, and a general holding back.

S. T. Ballard, president of the Ballard & Ballard Company, has gone to Florida, where he will spend a month's vacation, at his winter home.

PHILADELPHIA

T. A. SIEBER

CORRESPONDENT

ACCORDING to the monthly report of the statistician of the Commercial Exchange, the stocks of grain in public warehouses in Philadelphia on December 1 were: 1,899,684 bushels wheat, 40,783 bushels corn, 256,842 bushels oats, compared with 1,276,337 bushels wheat, 73,291 bushels corn and 250,854 bushels oats on November 1, and 1,653,979 bushels wheat, 17,445 bushels corn and 190,059 bushels oats on December 1, 1919. Receipts of grain at Philadelphia during the month of November were: 3,445,048 bushels wheat, 264,807 bushels corn, 316,692 bushels oats, 194,928 bushels rye and 53,701 bushels barley. Exports from this port during the month of November were: 2,677,145 bushels wheat, 232,624 bushels corn, 43,008 bushels rye and 51,880 bushels barley.

C. Herbert Bell, of the firm of Samuel Bell & Sons, and president of the Commercial Exchange, has recently returned from a duck hunting trip at Munden, Va., along the James River.

John K. Scattergood, of the firm of S. F. Scattergood & Co., grain merchants, has returned to his desk in the Bourse, after being confined to his home for a period of 20 weeks with complication of diseases.

Wm. M. Richardson, president of the Philadelphia Export Company and vice-president of Richardson Bros., grain merchants, has returned to his office after being confined to his home in Atlantic City with a slight attack of pneumonia.

Application for a charter of incorporation under the laws of Pennsylvania has been made by the Iron City Elevator of Pittsburgh, Pa.

John O. Foering, former Chief Grain Inspector of the Commercial Exchange, and wife, have returned from a visit of about a month at Westtown Farmhouse, near West Chester, Pa.

Frank M. Rosekrans, of the grain and feed firm of Rosekrans-Snyder Company, has recently returned from a business trip in the West.

Wilbur Barker, assistant manager of the Harrisburg Feed & Grain Company, Harrisburg, Pa., is paying a visit to the Philadelphia representative, George M. Richardson, this week, as well as renewing acquaintances on the Commercial Exchange floor.

Embargo No. 5273 has been placed by the Philadelphia & Reading Railway Company account accumulation on all freight destined to Philadelphia, consigned to Commercial Warehouse Company, in charge Willow & Noble Streets Agency.

Embargo No. 349 has been placed by the Pennsylvania Railroad Company on grain and grain products on account of Shane Bros. & Wilson Company, Millbourne, Pa., although permit may be obtained from R. C. Marse, superintendent of transportation, Broad Street Station, Philadelphia, Pa., for such shipment.

Wm. J. Carroll, grain merchant, Erie, Pa., who had been ill for several weeks was found dead in his warehouse where he had shot himself through the head with a revolver. He is survived by a widow and two sons.

A charter was granted the United States Cereal Corporation, under the laws of Delaware, to manufacture food products with a capital of \$100,000 by Harry M. Woodruff, L. G. Griffin and Sam Gompers of Birmingham, Ala.

J. S. Stevenson has erected a new grain elevator and feed house at Midvale in the vicinity of Waynesboro, Pa., which will be run by an electric motor. The cost of the improvements is about \$10,000.

C. Y. Wagner, Inc., has been formed at Bellefonte, Pa., for the manufacture of grain products. The incorporators are: L. Y. Wagner, J. S. Spangler, R. B. Spangler, and C. H. Wagner.

The Austin Boyd Company has recently been formed and started business on December 1, at 522 Bourse Building, Philadelphia, to deal in grains and mill feed. Mr. Boyd was formerly connected, for the past nine years, with the Quaker City Flour Mills Company, and for the last three years has been in charge of the feed department. Mr. Boyd has been a member of the Commercial Exchange for about two years.

Dr. C. H. Hadley, plant quarantine inspector of the Department of Agriculture, stationed at Riverton, N. J., Entomological Laboratory, discussed the methods of combating the Japanese beetle at a recent meeting of the Philadelphia Society for Promoting Agriculture. He said the establishment of a "barrier band" around the

infected area in Pennsylvania and New Jersey was successful to a large degree as it had been found that the beetle had not worked through it, and that in another season the Government experts expected to be able to announce a poison formula that would prove disastrous to the pest.

The business of J. J. Kennedy of Zelienople, Pa., has been sold to his three sons who will continue the business under the firm name of J. J. Kennedy & Sons.

Due to increased business the Plymouth Mill & Grain Company, Wilkes Barre, Pa., will erect a larger mill, it is stated.

New memberships in the Commercial Exchange have been petitioned for during the past month by Charles J. Haigh and J. Tyson Heather.

The Inter State Flour & Feed Company was elected to membership in the Commercial Exchange by the Board of Directors at its last meeting.

The corn crop this season was one of the largest ever harvested in New Jersey. The average yield per acre is estimated at 44 bushels and the total production at 11,264,000 bushels.

The boys of the Glen Mills School of Pennsylvania gathered a crop of corn that touched the magic figures aimed at by all enterprising farmers, or an even hundred bushels of shelled corn per acre from a 24-acre field.

Farmers met at Dover, Del., last week and formed a union of their own, which, they claim, equals in strength any of the state's industrial unions.

The number of cars unloaded during November at the Girard Point Elevator was: 798 wheat, 2 oats and 31 rye; at Port Richmond Elevator, 1,547 wheat, 147 corn, 16 oats, 77 rye and 31 barley; at Twentieth Street Elevator, 13 corn, 80 oats, 1 barley, 7 buckwheat and 1 milo maize.

Screenings

EACH spring Canada requires about 65,000,000 bushels of seed grain and 9,000,000 of seed potatoes or about 8 per cent of her annual average production.

ON a 26-acre field a wheat yield of 2,002 bushels, or 77 bushels to the acre was obtained by R. A. Ring, near Buhl, Idaho. The entire yield is being kept for seed.

IT HAS taken a long time, but gradually farmers are coming to realize the value of pedigreed seed. Minneapolis No. 2 rye in South Dakota has given better results, so far as winter killing is concerned, than Rosen rye, and the seed is in demand.

RUST and scab reduced the wheat yield of Minnesota by 9,000,000, according to P. H. Kirk, U. S. agricultural agent for that state. The campaign against the barberry has helped some, but seed wheat in the infected districts needs preventive treatment before the losses can be materially reduced.

WALTER Ross, receiver for the Toledo, St. Louis & Western Railroad Company, E. Newhouse, Frank O. Lord and Stephen Martin are defendants in suit filed by the Windfall Grain Company of Windfall, Ind. The company asks for \$2,000 for loss sustained on car of corn consigned to the plaintiff at Sims. The car became stalled and the contents spoiled.

THE Orient has consumed an unusually large amount of wheat and corn products during the last two years on account of the rice shortage. Last year, however, Japan had 310,894,000 bushels, which is 2,000,000 bushels more than the average consumption and compared with the average production of 287,232,000 bushels. The general rice situation this year is promising.

ACCORDING to the Japan Chronicle for June 19, 1920, the Department of Agriculture and Commerce gives the estimate of wheat, barley, and rye crops, as follows: Wheat, 28,055,450 bushels; barley, 36,699,082 bushels; rye, 40,536,433 bushels. As compared with last year, these figures show a decrease of 4 per cent in wheat and 9½ per cent in barley, and an increase of 9 per cent in rye.

THE estimated amounts of wheat, barley and oats required in Great Britain during the next 12 months will be far above the average but not unprecedented, according to the Trade Commissioner of the Canadian Department of Trade and Commerce. The amount of wheat required will be 282,080,000 bushels. Deducting the domestic production of 64,491,200 bushels, the quantity that will have to be imported is 217,588,800 bushels. Stocks of barley are also extremely low, and it is thought that 50,000,000 bushels could be advantageously imported. The supply oats needed to satisfy the demands between now and the harvest of 1921 will amount to 60,000,000 bushels.

FARMERS NATIONAL GRAIN DEALERS CONVENTION

On December 2 and 3 the Farmers National Grain Dealers Association met in convention at Chicago. Over 400 registered and the meeting was replete with good addresses and pertinent discussion. It was patent throughout the meeting that the Association is determined to do something. Just what that "something" will eventually prove to be remains to be seen. A spirit of dissatisfaction and unrest was apparent, and a demand for a change in marketing conditions. Some course of action will come out of this spirit; it is to be hoped that the course will be well charted and free from rocks.

Perhaps the meeting can be best described by giving first of all the resolutions that were adopted.

Crop Reporting Service

We urge Congress to promptly take necessary action for the establishment of a world-crop reporting service, covering both consumption and production under the auspices of the United States Department of Agriculture, and we ask that this Department be given needed funds for the collection of such information and its prompt delivery to farmers, and we especially approve to this end the plan recently submitted to Senator Cummins by the officers of this organization.

Urge Banks to Help Farmer

We believe that the farmer is entitled to financial credit which will encourage the orderly marketing of his crops, and we see no excuse for the extension of credit for speculative purposes while this important need of the farmer is desired. In view of the real danger of lessened food production which is now in prospect, we urge upon the Federal Reserve Bank and financial and governmental interests generally a prompt and definite action of this subject.

Change Tariff to Protect Farmer

We firmly believe that the present tariff laws should be amended so as to provide adequate protection on the products of the farm if the tariff is continued on the necessities which the farmers purchase.

Approve Committee of Seventeen Investigators

That it is the consensus of opinion of this convention that constructive steps should be taken promptly to enable the farmers of this nation to collectively buy and sell farm necessities and farm products. The present system of marketing farm products must be reorganized. This will involve very large financial transactions, probably aggregating several hundreds of millions of dollars annually if the movement shall be supported by any substantial proportion of the farming community in the grain belt.

Therefore, we heartily approve the efforts of the Farmers Marketing Committee of Seventeen to investigate the situation thoroughly, with competent, expert assistants, before submitting any plan for our consideration.

And further it is our recommendation that nothing further shall be done toward the formation of a national co-operative machinery or the purchase of large terminal elevators, or the establishment of an export company, or plans for pooling farm products, locally or nationally, until the Committee of Seventeen shall have rendered its report and the same shall have been considered and officially passed upon by the state bodies represented in this organization.

However, in the meantime we believe preliminary steps may properly be taken, and these resolutions shall not be interpreted as preventing state marketing associations securing seats on the exchange.

Endorse Farmer Commission Companies

The time has come when farmers must go further with the marketing of their products. We recommend the establishment of farmers' selling agencies in desirable markets, the operation of necessary storage and conditioning houses, and the close co-operation of state associations, whose members are interested in the same markets. We further recommend the appointment by the president of a committee to bring about uniformity in the establishment of these selling agencies and their co-operation so that farmers' elevators of various states patronizing the different farmers' commission companies will receive their just proportion of returns from these various companies.

Endorse State and National Purchasing Associations
Whereas, state purchasing associations for the purchase of farm supplies handled by farmers' elevators have proved successful in several states.

Be it resolved that we recommend the establishment of such purchasing associations by other farmers' grain dealers associations.

We believe that we should have a committee representing this organization of co-operative elevators, with authority to investigate and suggest specific plans for the creation of efficient purchasing agencies.

Therefore, be it resolved that the president of each state organization shall be requested to appoint one member to serve on said committee, and that the president of the national organization, the Farmers National Grain Dealers Association, shall appoint three members to serve on said committee, the same to be known as the Farmers Co-operative Purchasing Committee.

Further, be it resolved, that the said committee is hereby instructed to report at our next annual meeting, which shall be held in May, 1921, and that it shall also undertake to offer from time to time constructive suggestions for the creation of co-operative organizations for the purchase of farm necessities; and it is our recommendation that the said committee shall appoint the necessary subcommittees from its own membership for the purpose of investigation and recommendation to the main committee with reference to the acquisition and the distribution to the farmers of specific commodities whose use is common to the agricultural public.

Investigate Establishment of National Bank of Agriculture

Whereas, we believe that the large banks of the nation have not been as considerate of agriculture as the importance of this business warrants, and

Whereas, our past experience has proved that if

farmers are to accomplish the desired results it must be done by themselves, and

Whereas, the establishment of terminal commission companies in the grain market, of wholesale purchasing associations, and the successful even distribution of farmer grain marketing throughout the year will require adequate financial resources,

Therefore, be it resolved that we authorize the president of our Association to appoint a committee to investigate the desirability of the establishment of a bank of agriculture to be conducted under the banking laws and according to banking practice and to report at the next annual meeting if in their judgment such action is desirable.

Wish to Co-Operate with Other Farmer Organizations

Whereas, the time has come when various farm organizations performing the same class, of work must unite to successfully accomplish their aims,

Therefore, be it resolved that we offer the right hand of fellowship to all other farm organizations and declare that we will be ready and willing to embrace any opportunity of uniting with them to successfully market the farmers' grain.

The meeting was directed by President H. R. Meisch of Argyle, Minn., and the closest attention was given to every speaker.

One of the first to address the meeting was E. G. Montgomery of the U. S. Department of Agriculture, who spoke on the need of accurate knowledge of world supply and demand, in part as follows:

What we want to know is the trend of events, the trend of prices, which really means the trend of consumption and the trend of production, because after all, we still adhere to that old law of supply and demand. Sometimes we lose faith in it, and it looks like prices went this way or that, in spite of the law of supply and demand, but in a general way, the large trends upward and downward in prices, I think, conform to that law.

The thing that is most difficult to see, though, is the future supply and the future demand. In the United States we have worked out, for example, a crop estimating system that probably is the best of any country in the world, and we are able to prognosticate, two or three months ahead, the probable crop prospects. For example, today we are collecting information on winter wheat and as soon as that is compiled, which will be in about a week or 10 days, we will be able to tell the present winter wheat acreage. That at once gives something of a view of the amount of winter wheat that will be available in this country next year. Of course, we don't know what the yield will be, but from time to time estimates on yield and conditions will be put out, so we are able to give some angle ahead on the production of grain in this country, and we are beginning to develop some information on live stock of the same kind.

But we know very little about the world situation and I feel that we should have, at the same time, estimates on the world situation, because, after all, these great price changes are based on the world supply and demand. There is a world price level, and the same thing happens in Liverpool and Chicago and Buenos Aires at the same time and on the same day on prices, as you who are in the grain trade all know. There is a world price level for these commodities, especially grain, and you can easily see how that is controlled. There are about 40,000,000 bushels of wheat afloat in ships on the Atlantic Ocean today. A part is consigned; a part is on orders. If any wheat port around the Atlantic, in the Baltic Sea, or the Mediterranean gets out of line three or four cents on the price of wheat in side of twenty-four hours or less, cargoes will be diverted to that port. That is done every day in the year. Cargoes are diverted by cable or wireless.

So it is almost impossible on either side of the Atlantic or any wheat port to get out of line more than a few cents, and that preserves a sort of a world price level just like the level of the Atlantic Ocean at the ports.

Now, of course, as you go towards the interior you take off cost of handling and all the other costs, and the price reduces accordingly. So we have a great price level which begins at Liverpool, which is the highest price level point, it gets lower at all other ports, and that is maintained and adjusted every day. And when you consider that almost any day in the year there are between 30 and 80 million bushels of wheat afloat and a good part of this can be diverted by cable or wireless, you can see how this price level is kept at a very steady point.

You will find the same to be true of wool, cotton, of all these commodities, and I think that every one who will study prices in a world way recognizes the world price level.

The thing that determines that is world supply and world demand. It may not look that way to some one located on a particular farm in a particular state, because he sees this year not a very good crop, and not a very good supply, but whole states could be wiped out over night without very much affecting the world price level. It is the whole potential supply of wheat in the world that determines that.

Then the most difficult thing to ascertain is the demand. Demand, after all, is the thing that affects prices. It is what you or I or somebody else will pay for lemons that fixes the price of lemons. It is what somebody will pay for wheat that fixes the price of wheat. In the long run the cost of production determines that to a certain extent over a period of 10, 20, or 50 years, but it doesn't determine it in a particular year or at a particular place.

Mr. Montgomery then outlined a plan by which the Department could collect all available world information through the consular agents and a few specialists in strategic points.

Other speakers were Harry N. Robinson of Cleveland on "Co-operative Marketing"; M. R. Myers of Chicago on "Financing Farm Marketing"; Herman Danforth of the Federal Land Bank of St. Louis; John Miller of Galva, Ill., on "Establishing a Co-operative Bank"; Leslie F. Gates, president of the Chicago Board of Trade; Charles Latchaw of Ohio, on "Collective Purchasing of Farm Supplies"; Frank

Myers of Omaha; J. F. Booth, Co-operation and Markets Commissioner of Saskatchewan. We regret that space does not permit the publishing of all these addresses in full, but something of their tenor can be guessed from the resolutions which followed.

As this was not the annual meeting of the Association there were no standing committee reports nor election of officers.

MEETING OF FEED CONTROL OFFICIALS

The annual meeting of the Association of Feed Control Officials of the United States was held at Washington, D. C., November 18 and 19.

President A. J. Patten in his opening address spoke in part as follows:

While our primary duty as officials is to detect and prevent sophistication in feedstuffs, I believe there is a larger duty which we may perform. With the increasing cost of feedstuffs the problem of economically converting raw feeds into human food through the agency of the farm animal is becoming more serious each year. At the present time I know this is true in the section of the country where I come from. The decreased demand for fluid milk, owing largely to the closing down of many condenseries throughout the country, results in an increasing number of dairy animals being disposed of for beef purposes, and I know there is a feeling among many of our farmers to close out their business in order to avoid the financial worries and stress which they find themselves in at the present time. Not so very long ago the average farmer was able to produce all of the feeds—with the possible exception of the by-products which could be obtained from the local mill—to properly balance the rations for his farm animals. With an increasing demand for food for the human race and with the development of high-producing animals this has largely been changed and today the farm animal is being fed largely on the by-products.

It would be interesting I think to know what proportion of the cereal grains is now being diverted for the manufacture of human foods, as compared with that of 25 years ago. I have attempted to secure some data along this line, but I have been unable to find anything on record. It is certain, however, that a larger and larger proportion of the cereal grains is being diverted for human consumption and we must depend more and more upon the by-products from these processes for the concentrated portion of the ration for the farm animal.

Some of these by-products are classed as low-grade materials and in the minds of many it is considered an economic waste to transport such products over long distances. The use of these low-grade by-products in mixed feeds is a common practice and this is a subject which should receive careful consideration by students of animal nutrition. I am glad to note that we have on our program for this afternoon some of these matters for consideration by men who are studying these problems. As feed officials we have no time to devote to such problems, but we might well use our influence with the directors of various experiment stations and with the students of animal nutrition to have such problems given more attention. We as officials come directly in contact with many of the problems with which the farmers have to deal and we should endeavor to have such problems studied as widely as possible, not only to benefit the farmers themselves, but to benefit the industry if it has proved that it has the right to demand such things.

We also have an opportunity to serve the public in an educational way by incorporating into our reports and bulletins information concerning feeding problems and also information as to the utilization of new and untried feeds. We should not look upon our work simply as the performance of a police power, but we should perform a larger service by helpful suggestion to the manufacturers and in an educational way to the farmers through our influence with those who are in position to carry out investigational work.

Mr. Patten also recommended a careful review of the Uniform Feedingstuffs Law which was adopted in 1910, in the light of knowledge of feeds and feeding gained since that time.

Miss Silberberg of the Bureau of Chemistry told of the value of microscopic work in analyzing feeds and stated that the Bureau was prepared to give a two-weeks' training course to anyone who wished to take up this work.

George A. Olson, state chemist of Washington told of the increased use of oat and rice hulls in feeds sold in that state and the subsequent passage of the law which prohibits the mixing of ingredients in a prepared feed that would contain more than 10 per cent of crude fiber.

THURSDAY SESSION

President Patten appointed the following committees: Resolutions: Messrs. Hand of Mississippi, Cathcart of New Jersey, McDonnell of Maryland. On President's Address: Messrs. Frary of South Dakota, Halverson of Minnesota, and Bidwell of the Department of Agriculture. On Constitution: Messrs. Fuller of Texas, Fitz of Kansas and Sample of Tennessee.

The first speaker at this session was R. W. Chapin of Chicago, president of the American Feed Manufacturers Association. His address will be found on another page of this issue.

C. M. Vestal of Purdue University, was the next speaker. His address was on "The Influence of Fiber on Swine Rations." He advocated the use of roughage grown on farms, rather than incorporating it in mixed feeds, leaving it to the latter to supply the concentrates. He told of experiments in which it was shown that gain in weight was in inverse ratio to the fiber in the ration.

L. A. Maynard of Cornell University spoke on "The Utilization of Low Grade Feeding Materials." He advocated treatment of low grade materials to make their nutrients more available when eaten. He also stated that waste materials which were sometimes fed could be used to better advantage

in the industries, such as making furfural from corn cobs, alcohol from straw, and paper from cottonseed hulls.

FRIDAY SESSION

On Friday morning the following definitions were finally adopted:

Barley hulls are the outer chaff coverings of the barley grain.

Distillers' corn solubles, a by-product from the manufacture of alcohol from corn, is a mash liquor concentrated after the removal of the alcohol and wet grains.

Distillers' corn and rye solubles, a by-product from the manufacture of alcohol from corn and rye, is a mash liquor concentrated after the removal of the alcohol and wet grains.

Distillers' rye solubles, a by-product from the manufacture of alcohol from rye, is a mash liquor concentrated after the removal of the alcohol and wet grains.

Rye middlings or rye feed consists of the products other than the flour obtained in the manufacture of the ordinary or "100 per cent" rye flour from the rye grain which has been cleaned and scoured.

Rye red dog flour consists of a mixture of low-grade flour, fine particles of bran and the fibrous offal from the "tail of the mill."

Velvet bean meal is ground velvet beans containing only an unavoidable trace of hulls or pods.

Ground velvet bean and pod is the product derived by grinding velvet beans "in the pod." It contains no additional pods or other material.

Wheat ship stuff is the entire offal exclusive of the outer bran obtained in the usual process of commercial milling of flour.

The following officers were elected: President, E. G. Proulx, Lafayette, Ind.; vice-president, Guy G. Frary, Vermilion, S. D.; secretary-treasurer, Arthur W. Clark, Geneva, N. Y. Executive Committee: L. A. Fitz, Manhattan, Kan., three-year term; J. K. Haywood, Washington, D. C., two-year term; W. H. Strowd, Madison, Wis., one-year term.

NATIONAL GRAIN & HAY SHOW

The grain and hay show, held in connection with the International Livestock Exposition at Chicago, November 27 to December 4, was the best that was ever held. A wonderful assortment of grain was exhibited and the award of prizes was no light task, for every entry was of high class.

The Government and state exhibitions were, perhaps, less decorative than last year, but were more educational. Louisiana had an artistic grouping of products and other state and Canadian province exhibits were attractive, but in the main the object was to instruct rather than to merely please. Illinois had an exhibit of harmful weeds and passed out literature on weed laws, weed eradication, seed laws, etc. Indiana showed the feeding value of various crops and combinations of feed. Missouri had a miniature typical farm and the same farm rearranged on a scientific basis. These were samples of the sort of work the various states attempted to do. The United States Government had a varied collection and its grain grading exhibit attracted more attention than ever before. The dockage question seemed to be foremost in the farmers' mind and it was demonstrated hundreds of times to growers and elevator operators.

A new corn king, C. E. Troyer of La Fontaine, Indiana was crowned by the judges.

Mr. Troyer won the sweepstakes with a 10-ear sample of Johnson County White corn, from a 17-

Chas. Laughlin, Three Oaks, Mich. (Yellow); C. E. Troyer, La Fontaine, Ind. (White); Thomas Owen, Franklin, Ind. (Yellow); Gil T. Buford, Pulaski, Tenn. (White); Fred C. Karr, San Francisco, Calif. (Yellow).

In the single ear class the following won in their respective regions: C. Tilden, Park City, Mont.; W. W. Adams, Winnebago, Minn.; LeRoy A. Haines,



G. I. CHRISTIE
Director of National Grain and Hay Show

Princeton, Iowa, J. E. Mummert, Astoria, Ill.; Gil T. Buford, Pulaski, Tenn.; Fred C. Karr, San Francisco, Calif.

In the wheat section of the show the following took honors in the different grades.

I. D. Keckley, Marysville, Ohio (White Winter); John Howell, Montrose, Colo. (Hard Red Winter); J. C. Mitchell, Dahinda, Sask., Canada (Hard Red Spring); John Howell, Montrose, Colo. (White Spring); Sauerman Bros., Crown Point, Ind. (Soft Red Winter); R. F. Goman, Oak Lake, Man., Canada (Durum).

In the regional contests in oats the following were first in their respective regions: John W. Lucas, Calgary, Alta., Canada; V. R. Cohoe, S. Woodslee, Ont., Canada; A. F. Troyer, LaFontaine, Indiana; A. A. Malsbury, Lowder, Ill.; B. M. Jackson, Monroe, La.; John Howell, Montrose, Colorado.

In the hay section Otto Wolf of La Crosse, Wis., won first prize for Timothy, W. T. Otcheck, Grinnell, Iowa won first prize for Red Clover, and



PRIZE WINNING CORN SHOWN BY C. E. TROYER, LA FONTAINE, IND.

acre field with a yield of 109 bushels an acre. Deep plowing, thorough cultivation and the free use of the hoe brought premier honors, Mr. Troyer said.

It is the second time a Hoosier has been made king of corn, Peter Lux of Indiana having won first honors last year.

J. E. Mummert, Astoria, Ill., won the single ear sweepstakes with his sample of Yellow corn, while John W. Lucas of Calgary, Alberta, carried off first honors for the best sample of oats, and J. C. Mitchell of Dahinda, Sask., Canada, won first prize for the best sample of wheat. For the best sample of hay, the special award went to W. T. Otcheck, Grinnell, Iowa.

The country was divided into six regions. The special awards on corn of the 10-ear class were won by the following in their respective regions:

J. J. Shambaugh, Miles City, Mont. (Yellow);

Swartz Bros. Waukesha, Wis., for Alfalfa. First prize for rye went to Lewis Hutzler of So. Manitou Island, Mich.; for barley (two rowed) Arthur Norum, Hallock, Minn. was first; in the six rowed W. J. Hartman of Manhattan, Mont. was first.

Those who took high honors in the other classes follows: Milo Maize, R. E. Getty, Hayes, Kan.; Field Peas, E. H. Buckingham, Claresholm, Alta., Canada; Cow Peas, C. L. Looney, Winchester, Tenn.; Alsike Clover Seed, S. H. Proctor, Kimberly, Idaho; Alfalfa Seed, John W. Hardin, Kimberly, Idaho; Timothy Seed, Carl Holden, Williamsburg, Iowa; Red Clover Seed, Hjelle Bros., Newfolden, Minn.; Soy Beans, Harry E. Shrook, Kokomo, Ind.; Sweet Clover, Darrow Bros., Twin Falls, Idaho.

While the honor of corn king belongs to C. E. Troyer, won with his Johnson County White corn exhibit, he has just claim to other honors. In his

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section he was also third in the single ear class, and fourth with Yellow corn and fourth with oats. He was also fifteenth in the Soft Red Winter wheat class; and twentieth with flint corn. He thus took in six shares of the \$10,000 prize money donated by the Chicago Board of Trade, in addition to the silver cup which goes with the grand championship in corn.

J. E. Mummert of Astoria, Ill., winner of the single ear corn sweepstakes, was also fourteenth in Soft Red Winter wheat.

John W. Lucas of Calgary, Alta., who had the best sample of oats was also nineteenth in Hard Red Spring wheat. None of them is a one-specialty man.

Among others who made a showing in several different classes might be mentioned John Howell of Montrose, Colo., who was first with Hard Red Winter wheat; eleventh with Hard Red Spring; first with White Spring; third with Durum; second with two-rowed barley and first in his region with oats.

Agricultural experts characterized the show as the most comprehensive of its kind ever held and plans are being made to make it a permanent annual affair. The committee in charge of the show said it would go far toward general crop improvement, and urged the Board of Trade to make possible the permanency of the movement by contributing at least an equal sum next year and annually thereafter.

N. D. GRAIN DEALERS PLAN MEETING

The Farmers Grain Dealers Association of North Dakota will meet at Jamestown, March 1, 2, and 3. As there are between 700 and 800 farmers' grain companies in the state, arrangements have been made to open the homes of the city to delegates if hotel accommodations prove to be inadequate.

IOWA FARMER DEALER TO MEET

The Farmers Grain Dealers Association of Iowa will hold its annual convention in Cedar Rapids, January 25, 26, 27, in joint session with the Farmers Co-operative Mutual Elevator Insurance Association.

Iowa has 565 farmers' elevators. S. J. Conningham of Stanhope is president and Frank Meyers of Fort Dodge is secretary of the Association. The program will contain a great many things of interest and a record attendance is anticipated.

NEBRASKA DEALERS MEETING

On November 16-18 the Nebraska Farmers Co-operative Grain and Livestock Association met at Omaha. The meeting was one of the largest in its history. A number of important addresses were made, those by Owen L. Coon, published elsewhere in this issue, and by Secretary J. W. Shorthill being particularly practical and valuable.

J. S. Canady of Minden, was re-elected president; J. R. Morrison, of Chappell, vice-president, and J. W. Shorthill, of Omaha, secretary.

Resolutions were that "Congress immediately take such steps as may be necessary to effectively prevent the importation into this country of any agricultural products at any time when we have for sale a surplus of such products"; the formation of a commission company "in which the capital stock shall be held and owned exclusively by farmers' elevator companies located in the Omaha trade territory," and that "the relation of export rates on grain and grain products be preserved at a ratio that will not give to the milling industry of any other country an advantage over the milling industry in our own country, because the mills of this country can supply the entire flour demand of the country by operating at less than one-half capacity." Organizations of a state grain commission company and of a state co-operative elevator company were made. J. S. Canady, J. W. Shorthill, E. P. Hubbard and F. A. Baker were chosen delegates to the national convention of state associations to be held in Chicago. The delegates were banqueted by the Omaha Grain Exchange.

HAY ASSOCIATION TO MEET NEXT SEPTEMBER

The 28th annual convention of the National Hay Association will be held in the city of Chicago, September 6 and 7, 1921. The headquarters hotel has not been selected.

At a conference in Chicago, November 8, between shippers and receivers, shippers from Michigan, Ohio, Illinois, Indiana, Wisconsin, and receivers from Cincinnati, St. Louis, and Chicago, says Secretary J. Vining Taylor, the matter of discontinuing the custom of using the word "choice" in connection with Timothy hay quotations, was brought up and condemned. This Association does not recognize "choice" Timothy hay, and where shippers or receivers, either, are putting out their quotations in this manner, we feel that they are violating National Hay Association rules, and we earnestly request your co-operation in trying to eliminate this practice.

It is further found to be the custom in some places that hay is bought on one grade and sold on

a grade or two higher. We warn our people to be careful in respect to this or the "goblins will get you." This is not a joke, either.

This Association is going on record instructing our Transportation Department to file a formal protest with the Interstate Commerce Commission against any increase in demurrage charges which we understand will become effective December 1. Also, against the present reconsigning charges on hay; we, contending that this is discriminatory, as there is no charge for the same service on grain; and, further, to use our influence and efforts to get some reduction in the unreasonable, exorbitant freight rates on hay which has practically put some of our people out of business, especially where long hauls are involved.

Traveling Inspector Longnecker is on the job and is finding some interesting things as he goes up and down the country. We trust after the holidays to demonstrate that his work is along the proper lines thereby recommending that a second man be put on.

HORSE ASSOCIATIONS COMBINE

Two Horse Associations of America have been going along now for about two years. One had headquarters in New York, with F. M. Williams, president, and W. E. Murphy, secretary. The other was located at Chicago with Wirth S. Dunham, president and Wayne Dinsmore, secretary. Both associations had the same aims, but they could not get together. Finally, however, a committee from each organization met and recommended a plan of amalgamation, as follows:

1. The name of the amalgamated association to be "Horse Association of America, Inc."
2. Headquarters to be maintained:
 - (a) Headquarters—822 Exchange Place, Chicago.
 - III. (b) Eastern Headquarters—For later decision of Amalgamated Board of Directors.
3. The Seal and Trade Mark of the New York Association to be adopted.
4. The By-Laws of the Illinois Association to be adopted involving the following:
 - (a) The financial policy of the Illinois Association which provides for the sale of non-profit bearing shares of stock at \$5 per share on a basis of payments for three years.
 - (b) The amending of the Illinois Constitution to provide for 15 directors to be selected seven from each association and one at-large by the Board.

Those directors now holding office and not serving as such on the new Board will go on the Advisory Board of the new association.

- (c) Two vice-presidents; one to represent the Eastern interests.
- (d) The section dealing with the office of secretary to be amended to provide for an assistant secretary.
5. The amalgamated association to take over all assets of the New York association and assume any existing liabilities.

This plan was ratified by the eastern association on November 10, and by the western body this month. From now on there will be but one Horse Association of America, Inc.

SOME POINTERS ON CLAIM COLLECTIONS

BY OWEN L. COON*

In 1914 the railroads of the United States paid out \$31,000,000 in satisfying freight claims. During the past year they have paid out more than \$101,000,000—an increase of over 300 per cent in less than six years.

The present year has undoubtedly brought more grain and livestock claim losses than any other in the history of the trade. During the month of July of this year, 37 per cent of all the cars arriving at Milwaukee were in a leaky condition. For the same month of the preceding year it was only 20 per cent. The switchmen's strike brought with it an unparalleled number of delays in transit. I know of one car that was 76 days enroute on a 15-day run, with a loss of \$700. Such instances have been common. With the delays came sharp declines in the market. The freight claim departments of the western railroads, especially are swamped with work today.

Coupled with this condition you have now been forced to pay freight rates more than a third higher. We all hope that this very increase will bring a service and an equipment that will reduce the number of these losses. In the meantime, however, you are certain to have a leak in the profits of your concern which must be watched—and watched closely.

In the first place, don't forget to see that your claims are filed within four months. If the car has gone into another state, you have six months to file the claim, and if it is for delay you have even longer—but it is better to forget the exceptions and get the claim filed as soon as it arises.

In the second place, see that your claim is sued upon promptly after it is declined, provided it is good. If it is declined within the first 18 months after delivery of the shipment, you must have suit brought within the time limit of two years and one day. If it is declined any time after the lapse of 18 months from the date of delivery, you must see that suit is brought within six months from the

*Part of an address before the Farmers Grain Dealers Association of Nebraska at their annual convention at Omaha.

date the claim is declined in writing. If your claims arose during any part of the year 1917, however, they are still good, under a certain exception in the recent Transportation Act. But this new period of grace on such claims that arose in 1917 will not continue forever—and to run any risk of such claims being outlawed again, you should see that suit is brought promptly upon them. This will preserve your rights, and enable you to still keep the claim alive. If the railroad does not finally settle, it can later be dismissed or brought to trial, as you desire.

I expect many of you have at times neglected to write: "Loaded to full visible capacity" on your bill of lading. You have then had the freight assessed upon the minimum weight of the car instead of the actual weight. This freight can very easily be recovered if you do one thing and do it right. Get a copy of the bill of lading from your local railroad agent and have him write upon it as follows: "Notation that car was loaded to full visible capacity omitted by mistake upon original bill of lading." Simply get this corrected bill of lading, then file it with the freight overcharge division of the railroad together with your destination paid freight bill. If you don't get the money, I can.

Many of you have probably had to supply grain door lumber to cooper your cars when the railroad supply was exhausted. You can also get this money back if you go at it just right. But it's a ticklish proposition. Order a new supply of lumber well in advance. If it doesn't arrive in time, ask your local railroad agent, in writing, to buy some for you at the local lumber yard. He is authorized to do so under the rules of the Interstate Commerce Commission. If he fails to buy the lumber, then go ahead and buy it yourself. Keep an itemized account of the number of feet applied to each car and make a notation as to the amount of lumber supplied on the bill of lading before the agent signs it. After you have used up all of your lumber and received a new supply of grain doors, then file your claim for the amount you have spent. But don't send it to the freight claim department. It will never get paid if you do that. Make up the bill showing the amount of lumber used on each car and the cost of it, and send it to your division superintendent. He will approve it, and send it to the storekeeper. This official will send it to the auditor of disbursements and finally you will receive your check.

In the next place, remember that if a car is delayed an unreasonable length of time in transit, and the grade of the grain declines, you have a claim for the difference in price between what the grain would have sold for had it arrived on time and in good condition and what it actually sold for. Also remember that if the car is delayed an unreasonable length of time in transit, and the market price drops, but the grade of the grain remains the same, you nevertheless have a good claim for this drop in price during the delay.

Hundreds of such claims arose during the months of May, June and July of this year. The time within which they must be filed has not elapsed. If you have not filed all of such claims as yet, see to it as soon as you get home. It may mean that you will save your company hundreds of dollars. I have recovered 25 and 30 cents a bushel on any number of such claims.

To determine whether you have a good claim for delay follow a rule somewhat like this. Figure the difference in price between what the grain actually sold for and what it would have sold for on the day arrived at by allowing a movement of 50 miles per day. This is the amount of your damage. Thus if a car has 500 miles to go, the amount of the loss is figured on the basis of the price on the tenth day. Fifty miles a day, however, is unreasonable movement. The law holds the railroads liable only for "unreasonable delay." If you allow twice the time given for reasonable movement, you have certainly an "unreasonable delay." That would mean that the car with 500 miles to go must be in transit 20 days. What is "unreasonable delay" varies in each case, and it often will be less than half the reasonable movement of 50 miles per day. What I have just given, however, is about as close to a hard and fast rule for your guidance as can safely be given.

Remember that the time a car is in transit is gauged by the dates on the bill of lading and the grain inspection certificate—not by the date on the unloading weight certificate, unless the delay has occurred in the movement through the terminals after orders for final disposition have been given.

Though you may think my advice is tempered with self-interest I am going to advise you to stay clear of handling delay claims yourself or through commission men. They are too difficult as a general thing to handle for you or your commission man to be successful to the degree that you should. From what I have seen to date you will make money by having them handled by a railroad claim attorney. If he receives them before they are declined, he should easily be able to save you more than his 15 per cent charge of handling.

[TO BE CONTINUED.]



CANADA

E. A. Stone of Knowlton, Ont., has disposed of his grain and feed business to S. Hall.

Business operations have been commenced by the North West Grain Company, Ltd., of Vegreville, Alta.

Broudy & Scammell of Star City, Sask., have sold their grain business there to the Star City Grain Growers.

J. A. Maharg was re-elected president of the Saskatchewan Co-operative Elevator Company of Regina, Sask., at the recent annual election. Hon. George Langley was re-elected vice-president; W. C. Mills, secretary; D. M. Roberts, treasurer and James Robinson, executive representative.

WESTERN

Capitalized at \$25,000, the Agate Elevator Company has been incorporated at Agate, Colo.

The Occident Elevator at Cut Bank, Mont., is now under the management of W. C. Blackorby.

Stock amounting to \$15,000 is to be sold by the Farmers Elevator & Supply Company of Moro, Ore.

The Scott George Grain Company of Denver, Colo., is building a 20,000-bushel grain elevator at Holly, Colo.

A grain elevator of 25,000 bushels' capacity is to be erected at Melrose, N. M., for the Morris Grain Company.

A mill is to be installed in the elevator of the Lebanon Elevator & Grain Company located at Lebanon, Ore.

Plans are being made by the Farmers Union for the erection of a modern elevator and mill at Fountain, Colo.

The Springfield Mill & Grain Company of Springfield, Ore., has remodeled its elevator and has put it into operation.

The warehouse of the Seattle Grain Company at Rocklyn, Wash., is now under the management of Frank LaFayette.

Magill & Gurnsey are no longer in the grain business at Peck, Idaho. They have retired from business and left Peck.

E. W. Scott and H. A. Calvert have filed articles of incorporation at Deer Trail, Colo., as the Deer Trail Grain Company. Its capital stock is \$25,000.

An interest in the Farmers Elevator Company at Fife, Mont., has been purchased by Carl E. Halgreen. He will succeed C. H. Podger as manager.

Offices have been opened in San Francisco, Calif., by the Morgan Grain Company. T. E. Morgan is president; H. G. Sibley, secretary and A. H. Anderson, treasurer.

The elevators at Sterling, Colo., formerly owned by the Haley-Harris Company have been taken over by the W. C. Harris Company. W. C. Harris is sole owner of the firm.

A site at Havener, N. M., has been purchased by the Cramer Mill & Elevator Company. The company will erect on it a grain elevator of from 10,000 to 12,000 bushels' capacity.

Modern machinery for a grain elevator has been installed in the warehouse operated by the farmers around Levy, N. M. The warehouse has been repaired and four new bins added to it.

The Wright Bros. have sold their interests in the Belt Farmers Mill & Elevator Company at Belt, Mont., to the other stockholders in the company. Frank Wright will continue as miller in the plant until next spring.

The Grain Growers Elevator Company is succeeded by the McLean Elevator Company. The company has elevators at Becket, Ringling and Square Butte, Mont. The management of the two companies is the same.

Articles of incorporation have been filed by the Globe Grain & Milling Company, well known milling and grain firm of Los Angeles, Calif. The company is capitalized at \$15,000,000, of which \$637,200 is actually subscribed for.

The Mowat warehouse property at Fresno, Calif., has been leased by the Globe Grain & Milling Company from the Robert Kennedy Company. The company will carry a big stock on hand there, making Fresno one of its large warehouse points.

To handle carload grain and mill feeds at San Francisco, Calif., a co-partnership has been organized by B. O. Sawyer and F. L. Cross as the Sawyer-

Cross Company. Mr. Sawyer was formerly with the Northwestern Milling Company, which has closed its San Francisco office; Mr. Cross was with H. E. Woolner & Co., which now turned over its good will and building to the new company.

The elevator and warehouse of the Farmers Elevator Company at Heppner, Ore., have been purchased by the Tri-State Terminal Company. W. D. Hayden is to be manager of the company and Guy Johnson will be local manager at Heppner and Penleton.

The Fisher Flouring Mills Company has purchased the plant of the Milwaukee Elevator Company at Tacoma, Wash. The grain elevator and the dock space taken over through this purchase includes storage space 500x175 feet accommodating 24,000 tons flour and wheat.

R. P. Tjossem & Son of Ellensburg, Wash., are making extensive improvements to their warehouse. The grain elevator has a capacity of 10,000 bushels and is of cribbed construction. Their feed plant has also been remodeled and the building covered with corrugated iron. The improvements cost \$5,000.

INDIANA

Lloyd Waigh and C. Jordan are interested in the construction of an elevator at LaFayette, Ind.

The capital stock of the Colfax Grain Company of Colfax, Ind., has been increased from \$20,000 to \$30,000.

P. Oldfield is succeeded as manager of the Gordon Grain Company of Summitville, Ind., by M. Gerald of Dublin.

A preliminary certificate of dissolution has been filed by the Farmers Elevator Company of South Wanatah, Ind.

Clinton Royce is succeeded as manager of the Farmers Co-operative Company of Sweetsers, Ind., by Glenn Martin.

A new boiler has been installed in the plant of the United Grain & Supply Company of Swayzee, Ind. Clinton Royce is manager.

Jacob Miller has purchased the Avery (Frankfort p. o.), Ind., elevator to Chas. Hornbeck. Possession is to be given the new owner on March 1, 1921.

The elevator at Piercetown, Ind., formerly owned by Kraus & Spfelbaum, has been purchased by the Farmers Elevator Company. George R. Kinsley is manager.

A. P. Cohee and B. Farr have purchased the elevator at Fortville, Ind., belonging to McBane & McBane. The consideration was \$20,000. Possession was given on November 10.

Jasper Hester, Scott Meiks, J. M. Wissing and M. G. Wissing have filed articles of incorporation as the Rush Shelby Grain Company of Manilla, Ind. Its capital stock is \$75,000.

John Weeks, Edward Lee, Otto Lefforge, Robert W. Martin and Russell Shahan have incorporated the Indiana Grain, Feed & Coal Company of Crawfordville, Ind. Its capital stock is \$100,000. The company will handle grain, feed, straw, etc.

P. E. Goodrich and N. L. Bradfield have opened a new elevator at Boone Grove, Ind. The building was constructed from material of an elevator at Nickel which these two men owned and which was recently torn down.

EASTERN

The Iron City Elevator Company has been incorporated at Pittsburgh, Pa.

The capital stock of the Yantic Grain & Produce Company of Norwich, Conn., has been increased to \$100,000.

The Knight Grain Company of Newburyport, Mass., has sold its wharf there for the consideration of \$8,000.

The three sons of J. J. Kennedy have purchased his business at Zelenople, Pa. They will operate as J. J. Kennedy & Sons.

A 25,000-bushel tank concrete storage elevator has been completed at Walkersville, Md., for the Glade Valley Milling Company.

Frederick and Henry M. Walker and Wm. G. Cumming have filed articles of incorporation as J. N. Cowin & Co., of Medford, Mass. The company is capitalized at \$100,000.

T. L. Croteau, M. A. Bruce and S. E. Dill have filed articles of incorporation as Smith, Richard-

son & Co., of Wilmington, Del. The company will handle grain, hay, etc. The capital stock is \$100,000.

Walter Zang is now with the Harper Grain Company of Pittsburgh, Pa. He was formerly secretary-treasurer of the Mansfield Elevator Company.

An addition has been built to the plant of the Tioga Mill & Elevator Company of Waverly, N. Y. The wing will be 50x80 feet, one story and basement.

A grain elevator and feed house has been built at Midvale (near Waynesboro), Pa., for J. S. Stevenson. The plant is operated by electricity and cost \$10,000.

John O. Nutter is president and Harry G. Littlefield clerk and treasurer of the Alfred Grain & Grocery Company of Alfred, Maine. Its capital stock is \$10,000.

William J. and E. K. Wheelock and H. W. Rippey have incorporated as the LeRoy Grain & Cereal Company of LeRoy, N. Y. The capital stock of the firm amounts to \$15,000.

ILLINOIS

A feed house, 12x50 feet, is to be erected at Roseville, Ill., for the Farmers Elevator Company.

The elevator of L. Danner at Elgin, Ill., has been equipped with a carloader and ear corn blower.

A new farmers elevator company to operate on a co-operative basis is being organized at DeWitt, Ill.

The elevator of Davis Bros. & Stevenson at La Rose, Ill., which burned last summer, is being rebuilt.

Plans are under consideration by the Farmers Elevator Company of Biggsville, Ill., for a new elevator.

C. G. Lough is no longer manager of the Atwood Grain Company of Atwood, Ill., having resigned as such.

The new elevator near Alonza Station, near Milford, Ill., is now under the management of John Galloway.

The Carter Grain & Lumber Company of Ottawa, Ill., is installing an electric motor in its elevator at Dayton, Ill.

Work has been completed on the new Farmers Elevator at Greenfield, Ill. It has been under course of construction for a year.

Bear & Grussing have purchased the elevator of C. E. Fletcher at Royal, Ill. Mr. Bear is manager and John Grussing, Jr., is his assistant.

Remodeling has been done to the corn crib of the McFadden Grain Company of Forest City, Ill. The capacity has been increased considerably.

Work is practically completed on the new concrete elevator of Thistlewood & Co., at Cairo, Ill. The Reliance Construction Company is doing the work.

Two elevators at Nevada, Ill., have been purchased by Frank Gibbon. Mr. Gibbon was formerly manager of the Farmers Co-operative Elevator at Dwight.

The grain elevator at Croft (r. f. d. Fancy Prairie), Ill., owned by the Middletown Grain & Coal Company is under the management of Lee Newton.

An office has been opened at Havana, Ill., by J. A. McCreery & Sons of Mason City and Peoria, Ill. It will be under the management of John Peters of Mason City.

An office and warehouse 24x60 feet is to be built this spring at Taylor Ridge, Ill., by the Farmers Elevator Company. A new spur track is also to be run to the elevator.

The grain, feed and flour business of the Dahlgren Milling Company of Mt. Vernon, Ill., is to be enlarged. A new warehouse is to be built and a retail delivery service installed.

Fays Current is succeeded as manager of the Sawyers Grain Company's office at Tuscola, Ill., by W. F. Shaffer. Mr. Shaffer, who has been in charge of the Kempner Grain Company's office there is succeeded by Mr. Pletch.

Ballinger & McAllister have nearly completed construction on the elevator at Niota, Ill., which it is building for the Farmers Elevator & Supply Company. The capacity of the plant, which is of concrete construction, is 20,000 bushels.

H. L. Shilley, Frank Fritz, Harvey Bolinger, E. Fredick and S. Giddings have incorporated at Lan-

ark, Ill., as the Farmers Co-operative Association. The company will deal in grain, farm products, fuel, lumber, fertilizers, etc. Its capital stock is \$40,000.

Plans have been completed by the Lemoyne Elevator Company and the Luckey Elevator Company of Moline, Ill., to consolidate the two companies.

The Minier Co-operative Grain Company of Minier, Ill., is under the management of W. H. Sample. He succeeds L. A. Warner who is now with the Farmers Elevator Company at Manito.

OHIO AND MICHIGAN

A grain elevator is to be erected at Columbus Station, Ohio, for the Farmers Co-operative Company.

E. F. Roesch is succeeded in the elevator business at Martel, Ohio, by the Martel Equity Exchange Company.

Business has been started in the plant of the Nashville Co-operative Elevator Company of Nashville, Mich.

The capital stock of the Bad Axe Grain Company of Bad Axe, Mich., has been increased from \$150,000 to \$300,000.

A Randolph Grain Drier has been installed in the elevator of the Central Elevator Company of Toledo, Ohio.

Capitalized at \$50,000, the Springport Co-operative Elevator Company has been incorporated at Springport, Mich.

The capital stock of the Hemlock Elevator Company of Hemlock, Mich., has been increased from \$36,000 to \$100,000.

The new elevator of the Sciota Grain & Supply Company at Ashland, Ohio, has been completed and is ready for operation.

The Farmers Co-operative Company has been organized at Dayton, Ohio. The company will build a modern grain elevator.

The Alma Grain & Lumber Company of Alma, Mich., has been reorganized and hereafter will operate on a co-operative basis.

The Co-operative Elevator Company was incorporated at Amherst, Ohio, during November. The capital stock of the firm is \$50,000.

The Raymond P. Lipe Company at Bryan, Ohio, has installed a 1,000-bushel per hour Randolph Drier replacing a 100-bushel Hess Drier.

A grain elevator of 10,000 bushels' capacity has been completed at Union City, Mich., for the Co-operative Association of Union City.

C. E. Young has sold his elevator at Dallas (Urbana p. o.), Ohio, to C. S. Petry. He will organize a company to operate the plant.

The elevators of J. Hofman & Son at Overside and Fillmore (Holland p. o.), Mich., have been taken over by the Kolvoord Milling Company.

The Farmersville (Ohio) Grain Company has sold its business there to the Farmersville Exchange Company. Harry Daffler is manager.

Werts, Brown & Kane are succeeded at Verona, Ohio, by the Arcanum Equity Exchange Company of Verona, Ohio. They operate the only elevator there.

The elevator of Hite & Boreker at West Liberty, Ohio, has been purchased by the Mad River Farmers Exchange. It was formerly the elevator of Hartzler & Plank.

The Ottoville Milling Company of Ottoville, Ohio, has completed its new 6,000-bushel elevator at Douglas (no p. o.), Ohio. The company began operations in the elevator on December 1.

The Kalamazoo County Farm Bureau has started plans for the erection of a modern grain elevator and storage house at Kalamazoo, Mich. The elevator will cost in the neighborhood of \$100,000.

Articles of incorporation have been filed at Rex, Ohio, as the Rex Farmers Grain Company by S. F. Stidebaker, C. J. Eidemiller, S. W. Shroyer and J. B. Snell. The capital stock of the firm is \$20,000.

The elevator at Wharton, Ohio, owned by the Bristol Elevator Company has been purchased by the Farmers Grain Company. Mr. Bristol operated the elevator for the Sneath-Cunningham Company of Tiffin.

The grain business of Alkire & Sands at Delaware, Ohio, has been discontinued by them and the elevator operated by them leased to Elmer Lambert. He will conduct a retail hay, feed and coal business and handle baled hay for shipping.

The Middleton Elevator at Yale, Mich., has been purchased by the Brockway Farm Bureau. Ed. Ramstein of Lambs is in charge of operations. Chas. Wilt is president and W. A. Cavanaugh, secretary-treasurer of the organization.

Capitalized at \$35,000, the Pleasant Hill Farmers Exchange has been incorporated at Pleasant Hill, Ohio, by F. Kenneth, E. Sleppy, D. E. Laughman, W. Walker, D. Gorman and E. G. Kinnison. The company will erect a grain elevator.

The Union Farmers Exchange Company has been organized at Olmsted Falls, Ohio, capitalized at \$60,

000. The company will build a modern elevator there and a branch house at Columbia Station, where it will have a capacity of 20,000 bushels. J. J. Prindle is president of the company.

The two warehouses of W. E. Beagle & Son and D. H. Fox & Co., at Forest, Ohio, have been purchased by the Forest Farmers Co-operative Company. The Beagle company operated for the Sneath-Cunningham Company of Tiffin, Ohio.

The Farmers Grain & Supply Company of Camden, Ohio, has changed its articles of incorporation and hereafter will operate on a co-operative basis. S. E. Schellenberger is president; W. B. Cline, secretary; J. F. Becker, manager.

Extensive improvements have been made to the plant of the Nashville Co-operative Elevator Company at Townsend (Sheridan p. o.), Mich. The entire building has been rebuilt and old machinery replaced by new. The office building has also been enlarged and a new driveway built.

To conduct a grain elevator, the Equity Union Exchange was recently incorporated at Russia, Ohio, capitalized at \$30,000. The company will buy one of the elevators located there and operate it. B. L. Grilliot is president; Frank Lachey, vice-president and John Monnin, secretary-treasurer.

The capital stock of the Canton Feed & Milling Company of Canton, Ohio, has been increased from \$500,000 to \$562,500. In January the company will make an additional increase in its stock of \$437,500. The company, which now owns 10 elevators, intends to purchase and build about 10 more.

MINNESOTA AND WISCONSIN

Geo. Hoolz has purchased the elevator conducted by C. Bergman at Plato, Minn.

The Monarch Elevator at Hendrum, Minn., is under the management of E. W. Miller.

The elevator of the Farmers Co-operative Society at Alpha, Minn., has been opened for business.

An elevator is being erected at Ogema, Minn., for the Ogema Grain Company operating at that place.

Extensive improvements have been made to the plant of the Farmers Elevator Company at Wamamingo, Minn.

Chas. Eberlein has resigned his position as manager of the elevator of the Dodge-Hooker Mills at Shawano, Wis.

The elevator of the Farmers Elevator Company at Adrian, Minn., has been repaired and equipped with new machinery.

The capital stock of the Dennison Farmers Co-operative Company at Dennison, Minn., has been increased to \$75,000.

Edw. Sterr has sold his interests in the Star Malt & Grain Company located at Lomira, Wis. He has moved to Milwaukee.

The Pacific Elevator at Watson, Minn., is under the management of Theodore Walter of Bird Island. He succeeds A. G. Tessmer.

The Anderson Lumber Company has purchased the property of the Eagle Grain Elevator Company, Eagle, Wis., from D. W. Pardee.

Farmers around Rosendale, Wis., have made tentative plans for the organization of a co-operative warehouse and grain elevator company.

The Farmers Equity Elevator Company has been organized at Sauk Center, Minn. The company will purchase one of the local elevators there.

A grain elevator is to be erected at La Crosse, Wis., for the Kansas Flour Mills Company. The Barnett & Record Company had the contract.

Modern machinery has been installed in the elevator of the Farmers Elevator Company of Lamber-ton, Minn. The plant is modern in every particular.

A grain elevator is to be constructed and operated by the Farmers Union which was recently incorporated at Superior, Wis. Its capital stock is \$75,000.

The Pick Bros.' elevator at West Bend, Wis., has been purchased by the West Bend Farmers Co-operative Exchange. Immediate possession was given the purchasers.

A modern grain elevator is to be constructed at Pelican Rapids, Minn., for the Farmers Co-operative Warehouse Association. C. J. Swanson is manager of the organization.

The Byrnes & Heath Company has opened a modern elevator for storing corn at Wells, Minn. The company has leased the old mill elevator there and converted it into an elevator.

A. and N. W. Searl have organized the Farmers Market & Supply Company at Tomahawk, Wis., and will conduct a grain, feed, flour, etc., business. The company has purchased the Ruder Warehouse and has remodeled it.

The capital stock of the Equity Exchange of Prescott, Wis., has been increased from \$45,000 to \$125,000. The company has also made repairs on its building and installed two new cleaners, conveyors and separators.

To handle grain, farm products, flour, feed, lumber, etc., the Rusk Co-operative Mercantile Com-

pany has been incorporated at Rusk, Wis. Its capital stock is \$60,000. Thomas Wittig, Edw. Hein and Ed. Rossiter are interested.

The Farmers Elevator & Implement Company of Elmwood, Wis., has completed its new fireproof elevator. The elevator was built by the J. M. Preston Company of Lansing, Mich.

A new motor has replaced the gasoline engine in the elevator of the Farmers Elevator Company at Raymond, Minn. A small gas engine has also been installed to provide power during any emergency which might arise.

IOWA

Repairs have been made to the elevator of K. S. Myers at Milford, Iowa.

The elevator of Geo. A. French at Storm Lake, Wis., has been undergoing repairs.

A grain elevator is to be erected at Webster City, Iowa, for the farmers in that vicinity.

An elevator is to be erected in the near future at New London, Iowa, for the A. D. Hayes Company.

The Farmers Elevator Company has practically completed its new concrete elevator at Gladbrook, Iowa.

Capitalized at \$50,000, a co-operative elevator company has been incorporated at Austinville, Iowa.

A new elevator and lumber shed is to be built at Chariton, Iowa, for the Farmers Elevator Company.

An addition, 40x56 feet, has been built to the plant of the Farmers Elevator Company at Bedford, Iowa.

M. H. Spurgeon & Son of Correctionville, Iowa, have equipped their elevator there with a Globe Dump.

The office at the elevator of H. C. Scott at Buck Grove, Iowa, has been remodeled and electric lights installed.

The capital stock of the Farmers Grain & Coal Company of Pochohontas, Iowa, has been increased to \$20,000.

The Farmers Co-operative Elevator Company of Pioneer, Iowa, is under the management of E. J. Hood of Clarion.

L. R. Irons succeeds Mr. Anderson as manager of the Farmers Elevator Company located at Randolph, Iowa.

The driveway and bins at the elevator of the Farmers Co-operative Association of Hull, Iowa, have been repaired.

The Farmers Elevator Company of Erickson, Iowa, is erecting a corn crib, 29x40x40 feet, of 7,000 bushels capacity.

The Farmers Association of Hancock, Iowa, has started the construction of a new elevator at East Fort Madison, Iowa.

The Farmers Elevator Company of Glidden, Iowa, has completed the construction of its new concrete tanks, six in number.

The Nye-Schneider-Fowler Company of Omaha, Neb., has purchased the Updike Grain Company's elevator at River Sioux, Iowa.

The elevator of the Wilson Grain Company at Langdon, Iowa, is being operated under the management of A. W. Huntsberger.

Hereafter the business of the Farmers Elevator Company located at Jefferson, Iowa, is to be conducted on a co-operative basis.

A modern 10-horsepower engine has been installed in the elevator of the Farmers Elevator Company of Buckingham, Iowa.

The capital stock of the Farmers Elevator Company operating at Spencer, Iowa, has been increased from \$25,000 to \$75,000.

The A. E. Taylor Grain Company of Liberal, Kan., has established a branch office at Fort Dodge, Iowa, with Thos. Brown in charge as manager.

An addition, 18x45 feet, is being erected at the plant of the Rolfe Grain & Milling Company at Rolfe, Iowa. It has also been equipped with an oat grinder.

The elevator and coal business of M. O. Hocum at Klemme, Iowa, has been sold by him to the Farmers Co-operative Company which was recently organized there.

The elevator at Greenfield, Iowa, has been taken over by the Farmers Co-operative Company. They purchased it some time ago from John McDermott. Z. Stello is manager.

The grain dump in the elevator of the Farmers Elevator Company at Lytton, Iowa, has been remodeled and equipped with Trapp Auto Truck Dump and new scales.

The contract has been let by the Farmers Elevator Company of Ventura, Iowa, for a new fireproof concrete elevator replacing the one which was recently destroyed by fire.

The Farmers Elevator Company of Blencoe, Iowa, has increased its capital stock from \$25,000 to \$50,000. John Marley is president and B. Molle,

secretary of the company. The company has purchased and installed Trapp Combination Truck and Wagon Dumps in its elevator.

The Callender Grain Company is the new name of Callender & Williams of Ocheyedan, Iowa. A. B. Callender and A. D. Moreland are interested.

Fred Haase has completed a new 18,000-bushel elevator on the site of the Paul Peterson Estate which burned a few weeks ago at Zeiring, Iowa.

Henry Wahl has sold his elevator at Victor, Iowa, to J. T. McNally. Mr. McNally was formerly agent of the King-Wilder Grain Company at Hartwick.

The articles of incorporation of the Farmers Elevator Company of Rockwell City, Iowa, are being amended. E. Z. Smith is president and Geo. B. Lemmen, secretary of the firm.

The Katzenmeyer Mill and Elevator at Iowa City, Iowa, has been taken over by Geo. Katzenmeyer. His brother, Philip, Jr., has retired from the firm of Katzenmeyer Bros. and the latter was dissolved.

A grain elevator has been erected at Caldwell (Boone p. o.), Iowa, to be conducted on a co-operative basis by the farmers of that territory. It is 100 feet high and equipped with modern machinery.

The Farmers Co-operative Elevator & Livestock Company of Boone, Iowa, has completed a new corn shelling plant. It now has two large bins for ear corn, one for shelled corn, one for cobs and one for cleanings, etc.

The charter of the Farmers Co-operative Elevator Company located at Stout, Iowa, has been amended and capital stock increased to \$30,000. T. Fitzpatrick is president and Fred Helmers, secretary of the company.

August Sien, C. F. Gund and Myron Shipman have organized Gund, Sien & Co., at Atlantic, Iowa, and succeed Gund & Sien in business there. The firm operates 10 elevators in the state and has its headquarters at Atlantic.

Peter Hatton is president; E. J. Busch, vice-president and E. A. McKee, secretary-treasurer of the Farmers Elevator Company, recently incorporated at Montrose, Iowa. The capital stock of the firm amounts to \$25,000. Business will be started January 1, 1921.

THE DAKOTAS

Bailey & Sether's elevator at Barney, N. D., has been purchased by Stanley Jackson.

The Great Western Grain Company of Embden, N. D., is under the management of L. C. Midgley.

J. S. Hasland is succeeded as manager of the Osborne-McMillan Elevator at Harlow, N. D., by I. Iverson.

The Dakota Farmers Elevator Company of Melham, S. D., has let the contract for a 22,000-bushel elevator.

A cleaner has been installed in the elevator of the Farmers Elevator & Mercantile Company of Underwood, N. D.

A concrete pan and foundation has been put in under the elevator of the Andrews Grain Company of Goodrich, N. D.

The Farmers Elevator Company of Linton, N. D., has been reorganized and hereafter will operate on a co-operative basis.

The elevator of the Huron Equity Exchange of Huron, S. D., is being repaired. Mr. Brown is manager of the elevator.

The Farmers Co-operative Grain Company of Badger, S. D., has remodeled its elevator there. R. W. Cochran is manager.

Farmers around Harold, S. D., are interested in organizing a farmers co-operative company to conduct a grain business there.

The elevator at Watertown, S. D., which burned, is to be rebuilt. The plant is owned and operated by the farmers of that territory.

The elevator of Henry Reiner at Leola, S. D., has been sold by him to Reib & Ferick, who will operate as the Leola Grain Company.

C. Hofberg, T. Slafstein and F. B. Nupen have incorporated as the Driscoll Grain Company of Driscoll, N. D. Its capital stock is \$10,000.

Remodeling has been done to the elevator of the Farmers Elevator Company of Hooker, S. D. A 10-ton truck scale has also been installed.

Hopper scales have been installed in the elevator of the Equity Co-operative Exchange at Petersburg, N. D. The elevator is also being repaired.

The elevator of the Farmers Elevator Company at Iroquois, S. D., has been remodeled and painted. A 1,500-bushel automatic scale has been installed.

J. H. Ludwick, C. C. Hughes and D. Ahern have incorporated at Oral, S. D., as the Farmers Co-operative Union. The capital stock of the firm amounts to \$25,000.

The contract has been let by the Farmers Co-operative Elevator Company of Duxbury (Mansfield P. O.), S. D., for combining its two elevators into one structure. The house will, of course, be remodeled and overhauled and equipped with new

machinery, including a Fairbanks-Morse Semi-Diesel Engine; modern cleaner, Globe Dump and 10-ton Fairbanks Truck Scale.

A new driveway has been built and new dump and concrete pit and pan installed under the elevator of the Farmers Elevator Company of Nunda, S. D.

The name of the Farmers Elevator Company of Ashley, N. D., has been changed to that of the People's Elevator Company. Robert Miles has been retained as manager.

The elevator of the Farmers Union Elevator Company at Parker, S. D., has been repaired at a cost of \$6,000. New legs, spouts, dumps, and a truck scale has been installed.

The plant of the Co-operative Elevator Company at Raymond, S. D., is to be conducted under the management of P. G. Miller, who succeeds Joe Ethier. Mr. Miller recently sold his elevator at Fairmont, N. D.

MISSOURI, KANSAS AND NEBRASKA

The Bell Elevator at David City, Neb., has been purchased by Fred Graves.

A new office is to be built at Garland, Neb., for the Farmers Grain Company.

A new elevator is to be constructed at Burdett, Kan., for M. Mead of Sanford.

A grain elevator is to be erected at Lebanon, Neb. The contract has been let.

The O. C. Thomas Elevator at Franklin, Neb., has been taken over by W. A. Chilwood.

The office of the J. G. Price Grain Company of Salina, Kan., has been moved to Enid, Okla.

The Farmers Union local of Superior, Neb., is erecting a 35,000-bushel elevator costing \$75,000.

A grain elevator costing \$10,000 is to be erected at Brayton, Neb., for the farmers of that vicinity.

A 7,000-bushel elevator has been completed at Susank (Hoisington p. o.), Kan., for J. F. Stoskopf.

Capitalized at \$30,000, the Polo Co-operative Elevator Company has been incorporated at Polo, Mo.

Capitalized at \$10,000, the Farmers Elevator Company has been incorporated to operate at Henley, Mo.

The office of the Earl H. Ground Grain Company of Grand Island, Neb., has been moved to Scotts Bluff.

The Farmers Co-operative Elevator Company has been organized at Eugene, Mo., capitalized at \$10,000.

Cecil Wayland succeeds R. D. Jay as manager of the Farmers Grain & Supply Company of Carrollton, Mo.

The Kansas Flour Mills Company of LaCrosse, Kan., has let the contract for the erection of a grain elevator.

The Polk Bros. Milling Company of Harrisonville, Mo., is succeeded by the J. W. Karr Grain Company.

A new concrete grain elevator consisting of four bins has been erected at Imperial, Neb., for Krottar & Fitzgerald.

Negotiations were recently closed transferring the Grange Co-operative Elevator at Gibbon, Neb., to E. E. Kirk.

M. Allard is succeeded as manager of the Farmers Elevator Company at Primrose, Neb., by Frank Kusek of Tarnov.

The Manchester Grain Company of Manchester, Kan., has built a new office building and installed new scales in its elevator.

The Halls Elevator Company has been incorporated at Halls, Mo. The company will erect and operate a grain elevator there.

The Maryville Feed & Milling Company of Maryville, Mo., has sold its elevator and feed mill to the Farmers Exchange of that city.

Collingwood & Krehbiel have sold their property at Pretty Prairie, Kan., consisting of a grain and coal business, to D. E. Krehbiel.

The Lipscomb Grain & Seed Company of Springfield, Mo., has completed a new warehouse. The plant is of fireproof construction.

The elevator of the Atlas Elevator Company at Osmond, Neb., has been opened for business. Wm. Dockens is manager in charge.

The elevator at Oneida, Kan., has been purchased from the Farmers Shipping Association by the Derby Grain Company of Topeka, Kan.

The elevator of the Ward Bros. Grain Company of Ingalls, Kan., located at Pierceville, Kan., has been sold to the Security Elevator Company.

A grain elevator of 40,000 bushels' capacity and costing \$25,000 has been completed at Caldwell, Kan., for the Farmers Co-operative Company.

The Farmers Grain & Live Stock Association of Belgrade, Neb., has amended its articles of incorporation. The capital stock of the firm is to be 300 shares at par value of \$85 per share and its name has been changed to the Farmers Co-operative

Association. Chas. Wainser is president; O. F. Anderson, vice-president and C. F. Malander, secretary.

The Farmers Union Elevator Company of Bloomfield, Neb., has repaired its elevator there. The warehouse is 16x28 feet of cement and plaster.

O. A. Weddie, T. Johnson and others have incorporated the Farmers Union Co-operative Association at Savonburg, Kan. Its capital stock is \$25,000.

A building at Linn, Mo., has been purchased by the Farmers Feed & Produce Company. The company will establish its business in its new purchase.

The articles of incorporation of the Stamford Equity Exchange of Stamford, Neb., have been amended and the capital stock changed to \$25,000.

The Rushville Elevator Company of Rushville, Mo., capitalized at \$30,000 has made plans for erecting a modern elevator there in the near future.

The office of M. H. Taylor & Co., grain, hay and seed dealers, at Hewins, Kan., has been discontinued. The company is now located at Muskogee, Okla.

Improvements have been made to the Moore-Lawless Elevator at Leavenworth, Kan., costing about \$100,000. Operations have been resumed in the plant.

A co-operative elevator association has been formed at Phelps City, Mo., by the farmers of that vicinity. They will purchase and operate the local elevator.

E. A. Williams, W. E. West and others have incorporated the Ash Grove Farmers Exchange at Ash Grove, Mo. Its capital stock amounts to \$200,000.

E. R. Ray and others have filed articles of incorporation as the Farmers Elevator & Supply Company to operate at Ingalls, Kan. Its capital stock is \$20,000.

Capitalized at \$12,000, the Producers Grain Company Co-operative Association No. 120, of Barton County has been incorporated at Kenoma, Mo. S. H. Cotterill is manager.

A tobacco plant at Brunswick, Mo., has been purchased by T. Miller & Co., grain and elevator operators. They will establish a plant for manufacturing alfalfa products in this building.

Work has been started on the new elevator of the H. B. Wheaton Grain Company at Hugoton, Kan. It will be of 15,000 bushels' capacity and operated by electricity. The contract has been let.

A new feed grinder has been installed in the elevator of the Producers Grain Company of Centralia, Mo. The grinder is to be run by a 15-horsepower motor. It is grinding 50 bushels feed an hour.

Capitalized at \$100,000, the Mississippi County Co-operative Elevator Company has been incorporated at Poplar Bluff, Mississippi County, Mo. The company will erect and operate a large grain elevator there.

J. H. Rust's elevator at Altamont, Kan., is to be taken over by the Farmers Co-operative Company and operated by it, if sufficient funds can be raised. It has been estimated that \$30,000 will cover the expense.

J. F. Hubka is president of the recently incorporated Farmers Elevator Co-operative Company of Virginia, Neb. Its capital stock is \$25,000. The company purchased an elevator at Virginia last August.

A. N. and G. Rennie and M. J. Long have purchased the elevator of the Ward Bros. Grain Company, Montezuma, Kan. They will handle grain, flour, feed and coal and will operate as the Montezuma Grain Company.

Concrete elevators costing between \$25,000 and \$50,000 are to be built this year at Bridgeton, Chesterfield, Allenton, Valley Park and Black Jack (St. Louis p. o.), Mo. Farmers in St. Louis County, Mo., are interested in the undertaking.

A new 20,000-bushel elevator is being erected at Council Grove, Kan., for the Ryan Grain Company. The company has a 12,000-bushel elevator at McCracken, Kan. After the first of the year the company will add three or four small houses to its line.

SOUTHERN AND SOUTHWESTERN

Construction work is under way on a new 25,000-bushel elevator at Crosbyton, Texas.

A warehouse is to be erected at Jackson, Tenn., for the Lawrence Mill & Elevator Company.

An elevator is to be built in the near future at Driftwood, Okla., for the farmers of that vicinity.

The Port Commission of Norfolk, Va., is contemplating the erection of a \$1,000,000 grain elevator there.

The Camp Elevator Company of Porum, Okla., has built a grain elevator there. The company will make extensive improvements to its house there in 1921.

Organization was recently completed of the Neil-Harrison Company, Inc., of Kingsport, Tenn., by Bristol and Kingsport men. J. S. B. Fugate is man-

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ager. The company has taken over the Neil & Harrison business and will deal in grain, seed, provisions, and fertilizer, both wholesale and retail.

An addition is to be erected to the elevator of the Roger Mills County Co-operative Association at Strong City, Okla.

The Oklahoma Grain Company has been incorporated at Altus, Okla., by S. M. Bryan and T. Tyler to buy and market grain and feed.

A co-operative elevator is to be built at Panhandle, Texas, and conducted by a farmers organization now being formed there.

O. H. Black, J. A. Craft and C. P. Neale have incorporated the O. H. Black Grain Company of Leonard, Texas, capitalized at \$20,000.

H. G. Hurst, W. L. Shelton and W. B. Hurst have incorporated the Hurst Grain Company of Claremore, Okla. Its capital stock is \$25,000.

The Farmers Union of Fairview, Okla., is contemplating the purchase of or the building of a modern elevator there in the near future.

A 10,000-bushel grain elevator is to be erected at Lyons, Ga., for the Toombs Potato & Produce Company. S. L. Sharpe is interested in the company.

J. T. Gibbons and D. A. Mock have completed a 10,000-bushel elevator at Olustee, Okla. They are operating the plant as the J. T. Gibbons Grain Company.

The capital stock of the Perryton Equity Exchange at Perryton, Texas, has been increased and the plans have been made for the erection of a new grain elevator.

The capacity of the new Schuler Grain & Elevator Company's elevator at Gonzales, Texas, will be 25,000 bushels. It is equipped with corn sheller, grist mill, baler and feed mill.

An additional 16 tanks have been constructed to the plant of the Smith Bros. Grain Company of Fort Worth, Texas. The addition is of concrete construction and entirely fireproof.

B. C. Miller, J. C. Josey and A. B. Goodman have filed articles of incorporation under the name of the Sour Lake Grain Company of Sour Lake, Texas. The capital stock of the firm is \$9,000.

A company has been organized at Waynesboro, Ga., under the direction of the Chamber of Commerce to establish a grain elevator, potato storage and stockyards there. Its capital stock is \$10,000.

The Billingslea Grain Company of Frederick, Okla., has built a new elevator with storage capacity of 50,000 bushels. It is 96 feet high, equipped with modern machinery. A new office building is also being erected in connection with the elevator.

A 20x20-foot office is being built for the Wildorado Elevator Company of Wildorado, Texas. A Howe Truck Scale, with type registering beam, is being installed. The capacity is being increased so that total capacity will be 45,000 bushels bulk and 5,000 bushels sacked grain.

RECEIPTS AND SHIPMENTS

Following are the receipts and shipments of grain, etc., at the leading terminal markets in the United States for November:

BALTIMORE—Reported by Jas. B. Hessong, secretary of the Chamber of Commerce:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	1,553,424	2,375,615	3,730,562	2,368,648
Corn, bus....	140,333	925,889	572,910	572,910
Oats, bus....	113,631	129,966	66,798	30,000
Barley, bus..	4,291	295,751	154,847	154,847
Rye, bus....	95,599	564,510	31,277	269,400
Hay, tons....	2,450	1,413	.....	.....
Flour, bbls..	260,427	135,888	222,266	16,036

CHICAGO—Reported by John R. Mauff, secretary of the Board of Trade:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	1,262,000	3,342,000	940,000	3,939,000
Corn, bus....	3,901,000	4,851,000	5,082,000	1,996,000
Oats, bus....	4,473,000	5,515,000	3,588,000	6,761,000
Barley, bus..	1,535,000	980,000	456,000	324,000
Rye, bus....	265,000	270,000	105,000	308,000
Timothy Seed, lbs.	4,009,000	2,582,000	1,503,000	1,964,000
Clover Seed, lbs.	747,000	1,941,000	391,000	952,000
Other Grass Seed, lbs..	1,477,000	1,770,000	846,000	1,672,000
Flax Seed, bus.	35,000	50,000	10,000	.....
Broom Corn, lbs.	2,343,000	2,409,000	1,478,000	1,656,000
Hay, tons....	12,823	16,705	1,380	986
Flour, bbls..	621,000	1,167,000	443,000	797,000

CINCINNATI—Reported by D. J. Schuh, executive secretary of the Cincinnati Grain & Hay Exchange:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	216,000	411,400	166,800	348,000
Corn, bus....	339,600	255,600	135,600	126,000
Oats, bus....	308,000	242,000	228,000	96,000
Barley, bus..	.....	1,300	.....	.....
Rye, bus....	3,600	9,600	6,000	13,200
Ear Corn, bus	15,200	79,200	.....	.....
Hay, tons....	8,536	6,435	.....	.....
Feed, tons...	1,710	2,430	.....	.....

GALVESTON—Reported by H. A. Wickstrom, chief inspector of the Cotton Exchange and Board of Trade:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	4,861,293	2,544,944
Corn, bus....	23,026	.....
Maize and Kaffir Corn, bus.	28,401	.....
Barley, bus..	53,125	.....

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	7,380,034	2,779,132	9,304,261	2,583,045
Bonded Wheat, bus.	175,633	63,384	263,780	168,000
Oats, bus....	209,154	33,872	34,982	9,186
Bonded Oats, bus.	64	.....	39	.....
Barley, bus..	772,153	156,539	995,013	635,000
Bonded Barley, bus.	1,227	21,355	1,065	50,375
Rye, bus....	2,216,143	922,158	2,102,874	2,288,022
Flax, bus....	589,105	80,708	960,150	155,073
Bonded Flax, bus.	71	.....	.....	.....
Flour, bbls..	671,570	1,266,960	798,250	1,388,555

FT. WILLIAMS, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	33,435,110	16,163,932	33,028,246	15,069,146
Corn, bus....	.....	60,717	67,224	60,709
Oats, bus....	5,669,722	4,273,804	4,577,748	4,838,623
Barley, bus..	1,530,519	1,515,155	1,547,188	1,376,597
Rye, bus....	532,302	202,171	581,641	345,293
Flax Seed, bus.	748,128	281,668	701,959	291,730
Mixed Grain, lbs.	3,394,817	4,635,464	.....	2,588,579

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	161,000	300,000	115,700	128,750
Corn, bus....	1,555,000	1,675,000	1,162,000	1,182,500
Oats, bus....	1,086,000	712,000	1,092,000	799,200
Rye, bus....	18,200	48,750	19,600	47,500
Hay, cars....	92	.....	100	.....

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	7,508,700	8,714,250	4,800,600	4,781,700
Corn, bus....	546,250	615,000	242,500	217,500
Oats, bus....	724,200	671,500	459,000	493,500
Barley, bus..	456,000	145,500	293,800	85,800
Rye, bus....	135,300	33,000	73,700	39,600
Hay, tons....	36,792	53,268	11,388	20,904
Flour, bbls..	46,475	96,525	252,200	352,950

LOS ANGELES—Reported by M. D. Thiebaud, secretary of the Los Angeles Grain Exchange:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	65,333	.....	.....	.....
Corn, bus....	36,600	.....	.....	.....
Oats, bus....	32,940	.....	.....	.....
Barley, bus..	75,000	.....	.....	.....
Rye, bus....	1,300	.....	.....	.....
Milo Maize, bus.	95,185	.....	.....	.....
Hay, tons....	39,000	.....	.....	.....
Flour, bbls..	39,060	.....	.....	.....

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	204,000	430,140	105,805	253,535
Corn, bus....	833,625	689,440	423,000	183,170
Oats, bus....	1,420,600	2,484,040	1,486,545	1,842,036
Barley, bus..	950,175	838,380	165,510	482,260
Rye, bus....	279,455	256,500	183,580	74,900
Timothy Seed, lbs.	60,000	63,000	163,043	185,936
Clover Seed, lbs.	124,024	833,220	401,281	501,425
Malt, bus....	49,735	51,300	313,839	1,175,121
Flax Seed, bus.	53,808	33,000	418	1,320
Feed, tons....	2,840	7,410	16,914	24,355
Hay, tons....	1,718	1,296	240	211
Flour, bbls..	51,480	77,227	127,953	105,045

NEW YORK CITY—Reported by H. Heinzer, statistician of the Produce Exchange:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	11,577,800	.....	7,373,000	.....
Corn, bus....	983,300	.....	1,250,000	.....
Oats, bus....	670,000	.....	44,000	.....
Barley, bus..	740,500	.....	504,000	.....
Rye, bus....	2,190,500	.....	1,713,000	.....
Clover Seed, bags.	2,319	.....	7,389	.....
Flax Seed, bus.	274,437	.....	.....	.....
Hay, tons....	13,787	.....	.....	.....
Flour, bbls..	676,126	.....	431,000	.....

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	14,470,840	12,124,730	4,886,610	3,088,810
Corn, bus....	961,270	710,150	443,460	297,380
Oats, bus....	2,036,350	1,394,970	1,165,800	1,366,320
Barley, bus..	2,212,000	1,237,790	1,952,040	1,140,010
Rye, bus....	395,920	591,240	283,990	178,740
Flax Seed, bus.	807,580	568,410	59,290	45,880
Hay, tons....	2,161	1,568	57	400
Flour, bbls..	99,007	93,405	1,744,981	2,171,646

NEW ORLEANS—Reported by Geo. S. Colby, chief grain inspector and weighmaster of the Board of Trade, Ltd.:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	4,684,529	739,125
Corn, bus....	107,801	50,400
Oats, bus....	21,495	63,610
Barley, bus..	211,139	250,273
Rye, bus....	42,857	.....

OMAHA—Reported by F. P. Manchester, secretary of the Grain Exchange:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	1,993,200	1,177,600	1,981,200	1,921,200
Corn, bus....	590,800	1,351,000	359,800	1,008,000
Oats, bus....	606,000	932,000	826,000	848,000
Barley, bus..	270,000	91,800	235,800	90,000
Rye, bus....	213,400	102,300	132,000	55,000

PEORIA—Reported by John R. Lofgren, secretary of the Board of Trade:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	136,100	120,000	114,000	105,600
Corn, bus....	1,092,400	2,272,400	549,450	1,978,850
Oats, bus....	640,800	925,300	613,100	1,287,100
Barley, bus..	154,000	54,300	128,800	51,800
Rye, bus....	13,800	9,600	10,800	7,200

PHILADELPHIA—Reported by S. S. Daniels, statistician of the Commercial Exchange:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	3,445,048	2,382,098	2,677,145	3,183,775
Corn, bus....	264,807	50,606	232,624	.....
Oats, bus....	316,692	844,375	.....	433,404
Barley, bus..	53,701	4,761	51,880	.....
Rye, bus....	194,928	115,595	43,008	17,465
Flour, bbls..	157,648	242,602	32,292	54,263

PORTLAND, ME.—Reported by Geo. F. Feeney, traffic manager of the Chamber of Commerce:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	2,269,522	1,850,105	1,071,024	1,743,422
Oats, bus....	.....	51,294	.....	.....
Barley, bus..	82,265	445,475	41,667	.....
Rye, bus....	.....	133,866	.....	383,000

ST. LOUIS—Reported by Eugene Smith, secretary of the Merchants Exchange:

Receipts		Shipments		
	1920	1919	1920	1919
Wheat, bus..	2,269,522	1,850,105	1,071,024	1,743,422
Oats, bus....	.....	51,294	.....	.....
Barley, bus..	82,265	445,475	41,667	.....

and seed man of Toledo, Ohio. He was formerly associated with W. H. Morehouse & Co., although for the past six months he had not been in active business. He was formerly a member of the Toledo Produce Exchange.

GRANGER.—On November 10, P. E. Granger died at Hawarden, Iowa. He was 75 years old at the time of his death. Mr. Granger started in the grain business in 1884 as Granger & Co.; in 1891 he sold out and moved to Sioux City taking charge of 18 elevators in the state. He is survived by 10 children.

HERELEY.—Daniel Hereley was killed when hit by a train recently. He was a former member of Chicago Board of Trade and was senior member of the grain and livestock commission house of D. Hereley & Sons.

JEFFORDS.—Jas. M. Jeffords was found shot to death at his home in Paducah, Ky. Mr. Jeffords was a feed dealer in that city.

LEE.—W. M. Lee died from injuries received in accident. Mr. Lee was employed in the elevator of the Clement Grain Company of Waco, Texas.

M'INTOSH.—On November 20, W. D. McIntosh died at Toronto, Ont. He was a pioneer feed and flour merchant.

NIXON.—J. T. Nixon died suddenly at his home in

Attica, Ind. He was president of Nixon & Van Deventer, grain and coal dealers there. His widow, one daughter and two sons survive him.

NORTHWAY.—Albert H. Northway died recently. He was a member of the hay concern, Albert Todd & Co., of Owosso, Mich.

PARSONS.—After a long illness, Capt. Edwin B. Parsons, a retired grain dealer, died at his home in Milwaukee, Wis., at the age of 84 years. Mr. Parsons was a member of the Milwaukee Chamber of Commerce. He had not been actively engaged in the grain business for a number of years. His son and two daughters survive him.

PETERS.—Henry B. Peters died on November 23 aged 85 years at St. Louis, Mo., where for many years he was in the grain business. He was a pioneer member of the St. Louis Merchants Exchange. He retired from business years ago but retained his Exchange membership. Survived by two sons.

WARE.—A. R. Ware died at Kansas City, Mo. He was formerly chief sampler and inspector on the Kansas City Board of Trade.

WESTERMAN.—Henry Westerman died recently at his home in Kensington, Kan. He operated several grain elevators in the northern part of the state

FIRES—CASUALTIES

Fitzgerald, Ga.—Fire destroyed the seed building of Henry A. Burkhart.

Allentown, Pa.—John E. Schoun lost his feed and flour store by fire not long ago.

Grafton, N. D.—Fire recently destroyed the Pioneer Feed Mill located at this place.

Parshall, N. D.—Together with 27,000 bushels wheat the Berge Elevator here was burned.

Oregon City, Ore.—Fire destroyed H. E. Dimick's warehouse recently. The loss amounted to \$25,000.

Galveston, Texas.—The cottonseed cake grinding plant of the Anchor Milling Company was destroyed by fire.

Warsaw, Ky.—Fire damaged the feed store of Myer & Brown. The loss is partly covered by insurance.

Chicago, Ill.—On November 26 fire damaged seriously the feed and flour establishment of H. C. Knocke.

Green Island (Troy P. O.), N. Y.—Fire damaged to the extent of \$2,000 the elevator of the Troy Grain & Storage Company.

Luverne, N. D.—Fire destroyed the Northwestern Elevator here. The loss included between 12,000 and 15,000 bushels of wheat.

Yazoo City, Miss.—Considerable damage was done to the building occupied by the Mississippi Grocery & Grain Company by fire recently.

Lyleton, Man.—Fire on November 9 destroyed the Ogilvie Elevator here, together with a quantity of wheat, oats, and a carload of flour.

Independence, Mo.—A loss of \$7,600 was suffered by the Frisby Feed & Fuel Company by fire not long since. The office and mill was burned.

Oklahoma City, Okla.—Damages were done to the warehouse of the Dunn Coal & Feed Company here lately by fire. The losses amounted to \$2,000.

Minneapolis, Minn.—Damages amounting to \$75,000 were done to the mill and elevator of the Central Milling Company by fire and dust explosions.

Madison, Kan.—Fire destroyed the elevator and warehouse of the Soule Mill & Elevator Company here. Loss amounted to \$50,000; insurance, \$30,000.

Melba, Idaho.—The plant of the Equity Co-operative Society was burned entailing a loss of \$15,000. There were 25,000 bushels grain in the plant at the time of the fire.

Bird Island, Minn.—Fire completely destroyed the Crown Elevator on November 24. The elevator had not been occupied for some time. The origin of the blaze is unknown.

Dallas (Hillsboro, p. o.), Ohio.—The elevator together with 400 bushels oats burned not long ago. The loss is covered by insurance. The elevator is owned by Mr. Perry of Piqua.

Malta, Mont.—On November 21 fire destroyed the Equity Elevator with 25,000 bushels wheat. The loss on grain is covered by insurance; the building was insured for \$15,000. The elevator is to be rebuilt.

Raymond, S. D.—On November 29 fire broke out in the Farmers Elevator Company's elevator which resulted in the complete destruction of the plant and its contents. The loss exceeded \$150,000. The old building had a storage capacity for 25,000

bushels grain; the new one, 40,000 bushels. It is believed that from 15,000 to 20,000 bushels grain were destroyed.

Paoli, Colo.—Fire on December 1 destroyed the elevator here owned by the Paoli Co-operative Company. About 10,000 bushels wheat contained in the elevator were also destroyed. The loss was partly covered by insurance.

Kongsberg, N. D.—Spontaneous combustion is believed to have caused the fire which destroyed the Cargill Elevator during the latter part of November. The building and contents were partially covered by insurance.

Munster (New Rockford P. O.), N. D.—The Munster Elevator at this place was destroyed by fire on November 11. In addition to the building, the entire contents were consumed. The elevator will probably be rebuilt. Much grain was damaged. The elevator was of corrugated iron construction, but the expansion of the grain and the intense heat caused the structure to bulge and collapse. The loss is partly covered by insurance which amounted to \$25,000.

Ryan, Okla.—On November 20 fire destroyed the grain elevator owned by L. L. Thorp. The fire was caused by a hot box. A considerable quantity of wheat and oats stored in it was destroyed. The loss is partly covered by insurance of \$25,000.

Milwaukee, Wis.—The Milwaukee Seed Company on November 15 suffered one of the largest fire losses in Milwaukee for a long time. The loss is placed at \$400,000; it has been stated that the loss is completely covered by insurance. The company is temporarily located at 387 Broadway.

GRAIN TRADE PATENTS

Bearing Date of November 9, 1920

Grain weigher.—Charles M. Lefler, Winston, Mont. Filed August 20, 1919. No. 1,358,003. See cut.

Claim: In a grain weigher, the combination of a body divided into a pair of grain receiving chambers, a valve pivoted at the upper end of the division of



said chamber for controlling the inlet of grain into the chamber, a second valve positioned at the lower end of the division of said chamber and controlling the outlet of grain from the chamber, said valve con-

nected for synchronous movement and arranged whereby the inlet control valve will prevent the inlet of grain into the chamber other than that which is closed by said outlet control valve, stops within said body for limiting the movement of said valves, and a weighing contractile spring connecting said valves and adapted to swing them past the dead center and into proper positions after operation thereof under weight of grain.

Separator.—Fred Kellar and William D. Neely, North Vernon, Ind. Filed April 3, 1918. No. 1,358,559.

Loading spout.—Edmund M. Hull, Buffalo, N. Y. Filed October 5, 1917. No. 1,358,446.

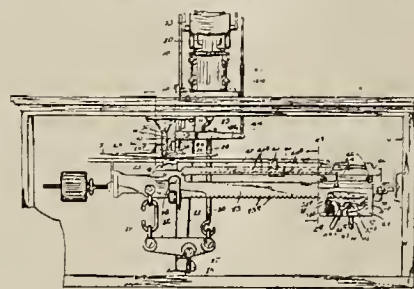
Belt tightener for elevator boots.—Thaddeus S. Grimes, Columbus, Ga., assignor to Luminus Cotton Gin Company, Columbus, Ga., a corporation of Georgia. Filed April 25, 1919. No. 1,358,437.

Grain car door.—Gust A. F. Johnson, Newman Grove, Neb. Filed April 17, 1920. No. 1,358,373.

Bearing Date of November 16, 1920

Weighing scale.—Charles E. Bird, Minneapolis, Minn. Filed May 26, 1919. No. 1,359,223. See cut.

Claim: The combination with a gate actuating mechanism controlling the delivery of the material to and from a receptacle whose contents are weighed by said scale and a scale mechanism, the latter includ-



ing a scale beam and a poise therefor, of a weight recording device arranged to be set by positioning of the poise, and means for completing the recording of the weight of the load represented by setting of the poise, automatically by a gate actuating movement of said gate actuating mechanism.

Grinding mill.—Julius A. Gerwen, Moline, Ill., assignor to Moline Mill Manufacturing Company, Moline, Ill., a corporation of Delaware. Filed January 22, 1919. No. 1,359,357.

Supplementary hopper for feed grinders.—Milton F. Williams, St. Louis, Mo., assignor to Williams Patent Crusher & Pulverizer Company, St. Louis, Mo., a corporation of Missouri. Filed March 21, 1919. No. 1,359,215.

Grain door for railway cars.—Thomas W. Collinsworth, Waverly, Kan. Filed July 9, 1918. No. 1,359,033.

Grain car door.—John M. Etiman, Mapleton, N. D. Filed May 17, 1919. No. 1,359,344.

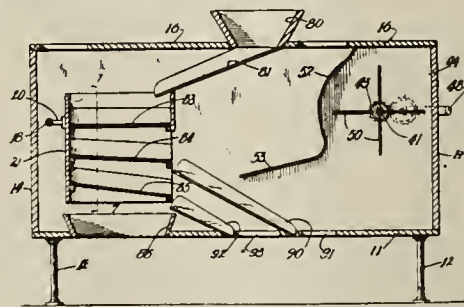
Bearing Date of November 23, 1920

Separator for grinding mills.—Bert McBride, Ada, Ohio. Filed June 30, 1919. No. 1,360,125.

Stock food.—William G. Brown, New Orleans, La. Filed September 27, 1919. No. 1,360,174.

Grain Cleaner.—Joseph Waitekaite, Little Rock, Ark. Filed July 20, 1918. No. 1,360,062. See cut.

Claim: In a grain cleaner of the character described, the combination of a funnel having an inclined spout with a hopper, a plurality of transversely disposed superposed screens in said hopper, two of said screens disposed at an inclination relative to the upper one, a funnel below said screens for providing a dust outlet, a plurality of vertical partitions longitudinally disposed with relation to said screens.



said screens having nettings of different width of mesh, chutes for conveying the different grades of grain coming from the screens to the bottom of the cleaner, means for blowing a current of air through said screens and means for imparting a reciprocating motion to said hopper.

GRAIN cars will no longer be used for hauling hides and fertilizer if the roads heed the caution recently issued by the American Railroad Association.

A MONTANA wheat grower raised 5,760 kernels of wheat from one seed this year. This is believed to be a record. There were 144 heads coming from a single root.

THE jute crop in India is 12 per cent below last year. As India is the source of most of our jute and burlap, this would indicate a strong position if the consuming market were not pretty well supplied.

BUSINESS men and farmers of North Dakota are beginning to advocate selling grain to relieve the money situation in the state. Twenty-seven banks in the state have failed, largely because the farmers have held their grain, and have not paid their notes.

FIELD SEEDS

REVISED SEED LAW IN NEW YORK

The provisions of the Revised Seed Law for the State of New York are discussed in a recent publication of the Experiment Station at Geneva, and directions given regarding seed testing and the submission of samples for testing by the Station. The new law is essentially a labeling law and should be studied by all those who contemplate the sale of seed for planting purposes. Bulletin No. 476 containing detailed information regarding the labeling and testing of seed may be had free of charge from the State Experiment Station at Geneva.

LESPEDeza SEED CROP

The 1920 production of lespedeza seed is expected to be about 10 per cent less than that of last year because of a smaller acreage harvested and a slightly decreased yield per acre, according to the Department of Agriculture *Market Reporter*. The quality of the seed probably will be good, because most of it was harvested and considerable has been thrashed under ideal weather conditions. At present most growers in the South are not selling at the prevailing prices of \$12 to \$16 per 100 pounds, believing that better offers will be received in January and February, when the commercial buying is usually done.

UTAH SEEDMEN FORM ASSOCIATION

Representatives of a large number of the seed houses in the state of Utah met at Salt Lake City last month and organized the Utah Seedmen's Association. The officers chosen are: Paul V. Kelly, Salt Lake City, president; Maurice Keating, Salt Lake City, first vice-president; C. M. Humphrey, Price, second vice-president; Paul E. Banker, Salt Lake City, secretary-treasurer. These, with S. J. Griffin of Ogden, form the directorate of the Association. The new association in addition to general activities to further the interests of the seed trade in Utah, will pay particular attention to the question of the new seed legislation which is being contemplated in that state.

CLOVER FOLLOWS WHEAT

Southworth & Co., of Toledo, Ohio, in their letter of December 11, say: Large offerings. Fair demand on the scale down. Clover can't help seeing what's happening to neighbor wheat. She just can't make her eyes behave, and so she sees weakness in other commodities and feels sort o' that way herself.

Pretty sizable crop, as every one knows by now. No scarcity. But the big decline discounts much of the large crop, and prices have acted better stabilized recently. General situation will continue a factor. Not easy to finance commodities nowadays. Sentiment is against price upturns.

December deliveries went into strong hands. Good deal trading over December to March at 15 cents difference, less than a full carrying charge.

Shipments light. Receipts not heavy, considering size of crop. This week's receipts included 295 bags of prime.

French firm writes: "We have a good crop. However, the seed has been badly damaged on account of rains and high qualities are very much sought after. Consuming centers have been difficult to locate on account of general unsettled conditions of the market. Farmers do not readily accept the low prices which prevail at the present time, general opinion here being that we have attained the lowest prices."

Alsike lost some of the premium over Clover, due to liquidation by longs and absence of demand. Any recent strength has been due to shortage of prime seed. Exports this week 3,255 bags.

Timothy firm. Small deliveries on December contracts. Some trading over to December and March at ruling difference. Receipts include 400 bags new prime. Exports this week 1,100 bags.

CLOVER SEED REACTED FROM THE HIGH LEVELS

Feeling existed that seed generally had entered a new field and better times expected shortly after the turn of the year, say Zahm & Co., Toledo, in letter of December 11. Feeling still exists, but market suffered some reaction due to a quick change about face in grains. This discouraged the small holders, and their selling, coupled with the selling of some local shorts, brought about a reaction.

Two things uppermost to bring about this condition are the cheapness compared with past five years, and the condition of the soil that was neglected due to high prices and must be put back to normal.

General business conditions lend no encourage-

ment to own anything, and no big advances in seed are probable at the moment, but the general undertone is good, very good, and a big demand is expected in the spring; bigger than any year for a long time.

Stocks here are not nearly as large as expected. The big prospects run in streaks in all the states. Poor ones trail along. Illinois talks a better crop than former years. Indiana early talked same way but some sections went back. Ohio will be a buyer next spring unless all signs fail. Farmers in other states will trade largely amongst themselves. This will shut off a lot of business that would come to market centers.

Far western states fell down this season and should come east for their supplies. Canada too may come this way for their supplies. Their home stuff not sufficient from all reports. Imports, if any, won't cut much figure. Some comes every year. The price and good old U. S. A. coin will draw same.

Present holders feel that Clover has had its work-out and discounts all factors, including the bad business conditions generally. Look for more or less fainting spells, but feel that general trend is for better things, as Red Clover is something we have got to have, and a lot will be needed and used this spring; say the spring demand will be filled shortly after the turn of the year.

Here's hoping. Everybody feels better with a good healthy market functioning to its utmost. Short sellers can't expect much cream left on that side as prices have declined a lot from high point. Farmers can carry Clover easier than grain as it takes less room. Reports say they are slow sellers in the prosperous districts.

NEW SEED TRADEMARKS

The following new seed trademarks were recently published by the U. S. Patent Office in its *Official Gazette*: "Buck Brand" garden and field seeds.



Robert B. Buchanan, Memphis, Tenn. Filed September 12, 1918. Serial No. 113,140. "P" field and grain seeds. The T. C. Power Company, Helena, Mont. Filed May 4, 1920. Serial No. 132,033. See cut.

SEEDS GENERALLY LOWER IN NEW YORK

BY C. K. TRAFTON

With practically all other markets all over the world exhibiting the same features it is by no means surprising that the local market for field seeds has continued decidedly unsettled with prices in the majority of cases falling to still lower levels. As was the case in practically all other commodities, the majority of buyers have continued to hold aloof, feeling convinced that the universal process of liquidation has not yet been finished. Under the circumstances it is not surprising that the volume of business in practically all varieties has been small.

Losses in value range from small fractions upward to 5 cents in White Clover and 6 cents in Orchard Grass. On the other hand, Bluegrass is unchanged to one cent higher and Timothy a half to one cent higher. The firmness in these two varieties was attributed to further large exports and additional sales for shipment abroad. Aside from this business has remained extremely quiet. In view of the recent unsatisfactory financial developments in the seed trade and the tight money situation generally, it is not surprising that no one is in a speculative mood.

Many distributors who usually buy in November and December in anticipation of their spring trade

have been buying almost nothing. In view of the universal economic unsettlement and the great uncertainty regarding the future, the determination of many dealers to wait until their actual spring demand develops before buying is not difficult to understand, though this condition was much more marked at the beginning of the month than it has been subsequently.

At this writing there are signs of more willingness to anticipate the coming season. More inquiries have been received from some quarters and some small sales have been made, notably of Red Clover, for spring shipment. As a consequence a somewhat firmer feeling has developed among certain holders and quotations in many cases have moved up a little from the extreme low levels ruling a week or so previously.

There has been some demand for imported Red Clover for December shipment from abroad, on which quotations range from 16 to 17 cents c. i. f. New York for fair average quality. Although foreign markets generally continue high in comparison with ours, there are signs, according to some importers, that France has become more eager to sell and is offering some rather choice lots at 16½ cents. There is little interest in Crimson Clover, which is offered at 6½ to 7 cents c. i. f. New York, fair average quality, for prompt and later shipments.

During the month roundly 2,700 bags of Timothy were exported, practically all of it to Germany and Scandinavian countries. Roughly 2,900 bags of Bluegrass were exported, including about 800 bags to the Continent, and the balance to the United Kingdom. Close to 300 bags of Redtop were also shipped. It is said that Europe is still interested in these three varieties especially, and in the event of noteworthy improvement in exchange conditions it is thought quite probable that considerable additional business could be done, notably with Germany and the Scandinavian countries. Further business in Bluegrass was prevented by the rise in prices. Foreign buyers were bidding 25¼ cents for 21 pound new crop seed, but obtained no appreciable amount as local quotations range from 27 to 28 cents. Stocks are small and in strong control.

The dullness in Alsike is not considered surprising in view of the fact that it is still held at a large premium over Red Clover, buyers naturally preferring the latter. The domestic buying of Alsike for spring consumption is said to be not even 50 per cent of normal. About 900 bags were exported during the month, embracing 400 to Germany and 500 to Great Britain, but the bulk of the foreign demand is said to be going to Canada because of more favorable exchange arrangements.

Alfalfa has been dull and ideas as to values are from 1 to 4 cents lower. A consignment of 50 tons arrived from Argentina, but it is thought to be still unsold, although said to be available at 17 cents. Advices from European markets have been firmer, but no buying interest has been displayed here as there is a considerable stock of the 1919 crop still unsold.

Other exports not mentioned above were: 300 bags of Clover to Germany; 2,015 bags of Fescue, chiefly to Copenhagen; and 100 bags of Rye Grass to London. Imports during the month included: 150 bags of Orchard Grass, 850 bags of Rapeseed, 100 bags of Red Clover from Germany, 813 bags of Alfalfa from Argentina; 350 bags of Rye Grass, 574 bags of White Clover, 50 bags of Clover from Chile, and 2,525 bags of sunflower seed from Argentina.

IMPORTS OF FORAGE PLANT SEEDS

The Seed Laboratory of the Bureau of Plant Industry, Department of Agriculture, reports the following imports of forage plant seeds permitted entry into the United States under the Seed Importation Act, during the month of November and for the five months ending with November:

Kind of seed.	November—		5 months ending Nov. 30—	
	1920	1919	1920	1919
	Pounds.	Pounds.	Pounds.	Pounds.
Alfalfa	110,000	1,150,400	281,500	5,154,100
Canada blue-grass	78,000	64,500	94,800	283,600
Awnless broom-grass	1,200	51,000	1,200	51,000
Alsike clover...	133,000	698,500	286,900	3,144,700
Crimson clover.	44,100	297,200	2,201,000	4,847,400
Red clover....	32,300	1,089,300	459,400	4,097,600
White clover...	.....	11,200	.....	22,400
White and alsike clover mixtures .....	.....	14,200	.....	20,500
Red and alsike clover mixtures	1,400	.....	1,400	700
Alsike clover and timothy mixtures .....	.....	120,900	.....	120,900
Broom-corn millet .....	.....	.....	1,100	225,400
Foxtail millet..	.....	.....	14,700	.....
Orchard grass..	.....	370,500	.....	1,126,100
Rape	1,363,900	2,004,100	2,317,600	2,188,900
English rye grass	118,000	198,600	373,500	380,400
Italian rye grass	105,700	66,100	237,000	170,900
Timothy .....	.....	.....	.....	3,200
Hairy vetch....	.....	32,000	400,700	108,300
Spring vetch..	.....	7,200	.....	156,300

(Field Seeds Continued on Page 508.)

HAY, STRAW AND FEED

REVISED FEEDINGSTUFFS LAW IN NEW YORK

The Revised Feedingstuffs Law in New York State becomes effective January 1, 1921. This revised law provides for registration of each brand of feed sold in the State of New York; tags, showing weight of contents and full particulars on materials used in manufacture; metal fasteners with sharp points cannot be used to attach tags to containers. The revised law provides for a license fee of \$25 for each brand of feedingstuffs sold in the State. Full information on the revised law can be obtained by application to George E. Hogue, Commissioner of Agriculture, Albany, N. Y.

HAY ARRIVALS STILL LIGHT

In their market letter dated December 10, Albert Miller & Co., of Chicago, say:

Timothy—Continues to meet a ready sale at full quotations. Keep it coming. Prices are good. Clover and Clover Mix—Same as Timothy. Selling all right.

Prairie—Good feeding Prairie wanted. Arrivals small.

Alfalfa—All arrivals selling readily.

Straw—Better demand. Ready sale today at quotation. Chicago needs hay.

At no time during past two months has there been large enough arrivals of hay to enable the trade here to accumulate a surplus. Stocks of hay in Chicago undoubtedly right now lower than any time previously this season.

HAY FIRM AT CINCINNATI

In our last market letter, we advised every shipper to use a short haul on both his grain and hay and that advice has proven to be absolutely correct, for hay prices have broken the same as the prices on every other commodity. We have had a big run of hay in this market, but receipts are fairly well cleaned up now and only about two days run in sight.

The top grades seem to have struck a rather firm position, owing to the fact that only a very small percent of the receipts is top grade hay, and a wider range of prices is showing itself every day between poor hay and good hay. The buyers are anxious and willing to purchase top grades, especially tagged hay at a large premium over grades below No. 2. We still say a short haul is advisable and every commodity should be turned over quickly.—*Mutual Commission Company, Cincinnati, Ohio, in letter of December 10.*

THE ST. LOUIS HAY MARKET

BY S. F. LARRIMORE

Receipts of hay in the St. Louis market during the early part of November were rather light, but as the month drew to a close receipts became much better, and the quality has also improved considerably. The largest proportion of the receipts toward the last of the month was a good grade of Timothy, with a scarcity of Clover Mixed. Offerings of Prairie have also been fairly liberal recently.

The market for Timothy continues steady, with only moderate receipts throughout the month of November, and there has been a good local demand for the better grades. Medium grades are also in fair demand, but the poor grades have had very little demand, and continue to run dull. The cotton situation throughout the South makes the demand from that section very light, and this condition will no doubt prevail until the cotton growers have had some relief from the present tight situation. There is very little outside demand for the poor grades of hay just now. Prices continue steady, but with the tendency of the general market downward, it seems advisable to market hay now.

Pure Clover hay had a more or less fluctuating supply, though the demand continued good for No. 1. Prices also varied somewhat, with a slight tendency downward toward the last of the month, although offerings were only moderate, and local demand good.

Light Clover Mixed hay continued steady through-

out the month, with but light offerings, and a very good demand for No. 1, containing about one-fourth clover. No. 2 also had a fair demand, but, as in all other kinds of hay, the poor grades are very dull, with but little demand. The general market seems to demand the best grades of hay, and is not willing to take up the stained, damaged or weedy hay.

Heavy Mixed Clover hay was fairly steady throughout the month, with moderate receipts and excellent demand. The price tended slightly upward, closing November 30 at \$28 to \$29.00. Dark Heavy Clover Mixed has been dull and not in much demand.

Alfalfa continues strong on the best grades, which are in only moderate receipt, with a good local demand. This has been the situation throughout the month of November. Good green and leafy Alfalfa, for dairy purposes, is commanding top prices. The medium and lower grades have been in more liberal supply, and selling at much lower prices than the high grade of hay. The milling demand is very light, owing to the low prices of alfalfa meal, but there is a fair shipping demand for good No. 2 grades. Prairie hay continues quiet, with but little demand, though receipts have not been heavy. Straw has been steady, with but little change in price.

NEW FEED BRAND

The following new feed brand was published in the November 9 issue of the *Official Gazette* of the



Ser No 136,599

U. S. Patent Office: "Stra-Lad" horse feed. Ladish Milling Company, Milwaukee, Wis. Filed August 28, 1920. Serial No. 136,599. See cut.

PROGRESS IN FEED MANUFACTURING By R. W. Chapin*

The business of manufacturing mixed feeds is relatively new. There are many of us present who can remember when there was no such business and no such article as a mixed feed other than possibly the by-products of wheat mixed together, or such simple grist mill products as various grains ground together. Moreover it was only a few years ago that there were very few industries outside of flour mills that made any by-products available for animal food.

The great progress that has been made in dairying through the development of superior milking cows has been largely effected by the availability of by-product feeds, among them high protein concentrates and with these profitable dairying has been made possible due to the increased supply of feedstuffs, including all kinds of by-products.

It took farmers a long time to learn how to breed good cattle. It also took them a long time to learn how to feed them. The farmer being conservative doesn't take kindly to new things, nor does he want to risk his money on experiments with unknown feeds. It took years to introduce gluten feed, which was one of our first protein concentrates. The farmer said it was corn with the richness taken out, which had just enough truth to be fallacious, seeing that protein feeds are grain with the milk left in and the beef taken out.

As many of you will recall the first mixed feeds were made to utilize by-products that needed reinforcing or sweetening. They were not made to be balanced rations, but simply to furnish an economical feedstuff. Even before we made manufactured compound feeds in this country to any great extent they were being made in Europe, especially Germany where dire necessity forced the utilization of many feeds that were then thrown away, among them being blood and molasses.

One of the first dairy feeds I can remember was

*President R. W. Chapin of Chapin & Co., Chicago, who is also president of the American Feed Manufacturers Association, delivered this address at the annual convention of Feed Control Officials in Washington, on November 18. It is a comprehensive resume of the growth, present conditions, and problems in the feed industry and should be read by every one interested in the feed trade.

blood, molasses and peat, all of these three products being cheap and plentiful in the interior of Germany where other feeds were costly and scarce. The late Prof. Otto Kellner was one of the first to call attention to these feeds and he severely criticized the use of peat, overlooking the fact that it was simply a necessity to find some absorbent to take care of blood and molasses so they would not putrify or ferment and could be easily handled and shipped in feed bags instead of the undesirable barrels. No one claimed any value for peat any more than they did for barrels, but the peat was an edible barrel.

At this time in Germany they had no feed laws such as we have and, of course, there were many unfair practices and inferior products. Analysis and ingredient laws soon followed and there were severe penalties for the adulteration of straight feeds. This soon put the industry on an ethical plane there the same as it has arrived at here. Every industry passes through a period of ignorance and unfair practices.

[TO BE CONTINUED.]

NEW YORK HAY MARKET FLUCTUATES

BY C. K. TRAFTON

Temporarily at the beginning of the month a steady tone prevailed in the local hay market. It was, in fact, surprisingly firm, all things considered. In the face of the big break in grain markets and in virtually all other commodities, reflecting the further progress of world-wide readjustment and deflation, prices for hay suffered little or no reduction. This was ascribed principally to the fact that the arrivals remained comparatively small, the movement from the interior having failed to increase materially, and it was stated that farmers and country shippers were decidedly opposed to accepting lower bids.

It was asserted that in some parts of New York state the yield has been disappointing, being slightly smaller than anticipated. In addition, it was declared that farmers were finding it difficult to obtain skilled labor, and consequently were marketing their crop slowly.

At the outset it was said that farmers had announced their determination not to sell their best hay at less than \$30 loose in the barn, which would mean close to \$42 in bales in this market, including labor, freight, etc. In the meantime, the majority of buyers were refusing to bid over \$40 for No. 1 Timothy to arrive.

Later in the month there was a radical change in the temper of the market, the undertone becoming decidedly weaker. Nearly all buyers were holding aloof or making appreciably lower bids. This led receivers to keep out of the interior markets or to send lower bids. No doubt, this weaker tendency was largely attributable to the huge declines in grain and other commodities. It was declared that the big breaks in corn and oats had forced them down almost to a pre-war basis. As a matter of fact, many unbiased and experienced dealers were free to confess that they considered corn and oats about low enough.

Partly because of this fact, many local dealers and consumers declared that they would increase their use of oats and corn products unless hay also became cheaper. These developments finally had a more positive influence on farmers and country shippers and they soon also became more willing to get down to a more reasonable basis.

Strictly choice grades of Timothy have been best sustained as the supply has continued decidedly light, while, on the other hand, there has been more inferior arriving. Clover has been especially weak, going down more rapidly than Timothy, as there has been only a limited inquiry for it.

Toward the end of the month the offerings became smaller, receipts having failed to increase as many buyers had expected. Consequently there was less selling pressure. On the other hand, the demand was more active, distributors having permitted their stocks to run down to a low plane, and consequently they were compelled to replenish, which caused a sharp recovery, and particularly in superior grades of Timothy and Light Clover Mixed. Advances from previous low levels averaged about \$2 or \$3 per ton.

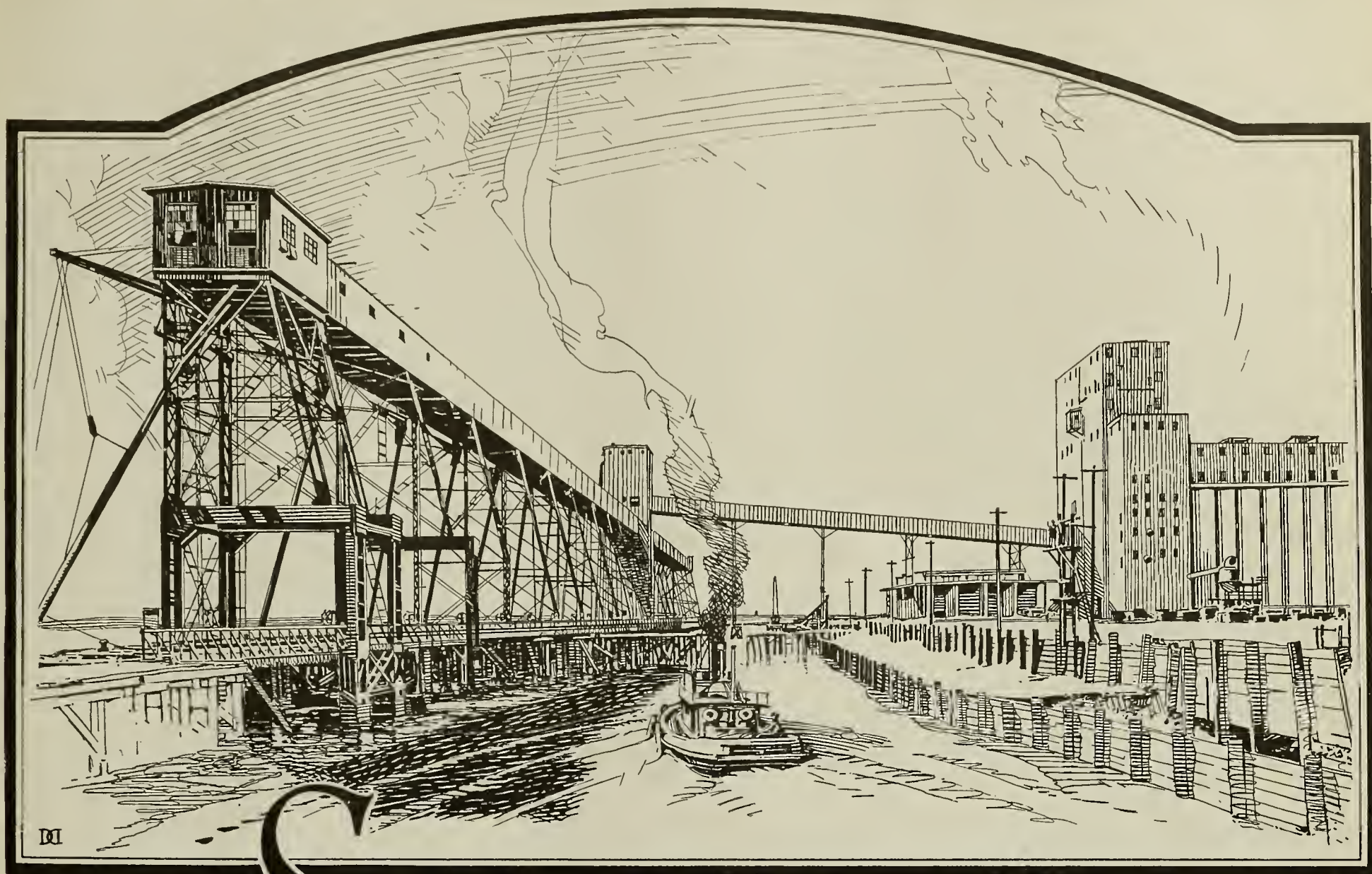
Offerings of straw have been larger and as the demand was lifeless prices gradually fell to a lower plane. Trade requirements have been decidedly insignificant. Later demand showed moderate improvement and a fair business was done at firmer figures.

(Hay Straw and Feed Continued on Page 510.)

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FIELD SEEDS

(Continued from Page 505)

THE MILWAUKEE SEED MARKET

BY C. O. SKINROOD

Milwaukee is in some respects growing as a seed center, according to the Annual Report of the Secretary of the Chamber of Commerce which shows that Timothy receipts jumped from 403,000 pounds in 1919 to 714,000 pounds for the year 1920. The Timothy seed trade therefore almost doubled. Milwaukee Clover seed receipts however, fell off from 4,271,000 pounds in 1919 to 2,787,000 pounds for 1920. The loss in Clover seed receipts was therefore a little more than 1,000,000 pounds. Flax seed receipts have had an enormous gain, jumping from 359,000 bushels in 1919 to 840,000 bushels for 1920. The trade considerably more than doubled in a single year.

From the standpoint of shipments, Milwaukee sent out 2,284,000 pounds of Timothy seed in 1919, compared with 2,510,000 pounds in 1920. Clover seed shipments also showed a very large gain, from 2,393,000 pounds in 1919 to 3,641,000 pounds in 1920, a gain of much more than 1,000,000 pounds. Flax seed shipments of Milwaukee dropped from 31,000 bushels in 1919 to 12,000 bushels in 1920. This indicates that shipments of flax seed for both years were negligible and that practically all the flax seed received is used here.

The Milwaukee Seed Company reports that it is ready to take care of its patrons despite its recent fire. The loss was placed at \$400,000 which was covered fully by insurance. Temporary quarters have been established at 387 Broadway. The company expects to be back in one of its buildings, which was damaged only by water, in the course of a week or 10 days. The other building will be in shape in about one month. All orders are now being dispatched. It will be necessary for the company to work a great many nights as it will take some time for the cleaning department to get back into full running order again. By January 1, the company expects to be in full working order again.

The fact that Wisconsin is not a great producing state for flax is shown by the crop of 63,000 bushels for 1919 and 77,000 bushels for 1920. The yield has been increased a little.

The Kellogg Seed Company reports that the deflation process is still strong in the seed trade, with many farmers hoping and waiting for higher prices for their seeds. "The demand is nothing like it

has been in former years, even when we thought business was poor," said Mr. Kellogg, "but we are not discouraged. We count on improvement in trade soon after the opening of 1921 and we expect demand to increase in the later winter and the early spring. There is a good trade in White Clover as the supply is getting low." The seed trade is no different than other business in being compelled to go through a readjustment process, Mr. Kellogg believes.

"We believe that prices are at the bottom and that buying will soon start. In fact there is a little more demand and business in this line shows signs of steadying." This is the view of the L. Teweles Seed Company. The company reports some inquiries are coming for seeds from those who have been holding off for the lowest prices. The company looks for an improvement in trade soon after the opening of the year, and a very decided improvement as spring approaches. The company's trade report says: "Red and White Clover are dull. Timothy is in good demand. There is a fair demand for Alfalfa, but movement is in general slow. The demand for Alsike is increasing and the good grades are not too plentiful."

The Courteen Seed Company also looks for a good demand for seeds after the holidays, believing that every dull period of trade must have an end. Wholesalers are not buying and producers do not want to sell at present prices, it is said. The Courteen company finds that receipts of Red and Alsike Clovers are light. White Clover is practically out of farmers' hands and in the bins of wholesalers. Alfalfa trade is reported very quiet, while there is a very good trade in Timothy, the company finds.

The Milwaukee Seed Company reports very decided losses, especially in the last two weeks in the Red Clover option market. But it is impossible to buy at country points and clean up seed in Wisconsin and meet the option prices. This the company says, is due to the fact that Red Clover crop of Wisconsin was much smaller than announced. "We are paying in this market \$18 to \$21 per hundred," the company reports. As to Alsike the company says: "Better grades are gradually disappearing and while there is some seed still left in the country, farmers are not free sellers at present prices. We are paying from \$18 to \$25 per hundred for Alsike."

As to Timothy, the company reports the market firm. Offerings of car lots on the Milwaukee Board of Trade are less than at any time in years and prices are \$6.50 to \$7.25 for the country run of Timothy. The Milwaukee Seed Company reports

the Alfalfa market stronger after the recent low prices, with ruling rate at \$16 to \$21 per hundred. The general Alfalfa trade is said to be just ready to wake up, because many jobbers who usually anticipate their wants in the fall have not done so this year and this will mean a December and January rush, it is believed.

An office has been opened at Salina, Kan., by the Reliable Seed Company. H. C. Meier is in charge.

The Reliable Seed Company of Salina, Kan., has taken over the Meier Seed Company of Russell, Kan.

The W. H. Bofferding Company of Minneapolis is succeeded in business there by the Armstrong Seed Company.

J. F. Durst of Kalona, Iowa, has made plans to deal in seeds exclusively. He has disposed of his hardware and implement business.

L. L. Coffman, J. M. Dally and F. H. Mathey have incorporated the Oklahoma Seed Company of Muskogee, Okla. Its capital stock is \$20,000.

Creditors of W. H. Small & Co., seed merchants at Evansville, Ind., are reorganizing the company. The company went bankrupt some time ago.

A building with 16,000 square feet storage space is now occupied by the Purcell Seed Company of Evansville, Ind. The company will carry a stock of field seeds, grain, stock feed, etc.

An interest in the Dakota Improved Seed Company of Mitchell, S. D., has been purchased by Richard Burn. He was until recently connected with the A. E. McKenzie Company of Brandon, Man.

T. H. Andrews is now with the Ozark Nursery & Seed Company of Nashville, Ark. He is in charge of the mail order department there. He was until lately operating as the Andrews Seed & Grain Company at Sherman, Texas.

Douglas Earl of Doylestown, Pa., has been appointed manager of the seed department of the American Seed & Seedtape Company of Newark, N. Y. He has been manager of the Great Valley Seed Company of Paoli, Pa., for some time.

The Utah Seedsmen's Association was recently organized at Salt Lake City, Utah, by seedsmen operating in Utah. Officers of the organization are: President, Paul V. Kelly, Salt Lake City; vice-president, Maurice Keating, Salt Lake City; secretary-treasurer, Paul E. Bank, Salt Lake City.

The Bureau County Farm Bureau has organized the Farm Bureau Co-operative Supply Company to handle seeds, feeds and fertilizers. The capital stock of the organization is \$50,000. The company has its headquarters at Princeton, Ill., and has a building 50x150 feet on the C. B. & Q. Axel M. Larson is president and J. E. Monier, vice-president.

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Trade Literature

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Crain's Market Data Book and Directory of Class, Trade and Technical Papers, now on the press, promises to be of unusual interest to advertisers generally and users of trade and technical papers in particular. It not only lists all of the business publications of the United States and Canada, giving circulations, rates, type page sizes, closing dates, etc., but supplies a market analysis of each trade, profession and industry. Thus the reader is given the basic facts of each line in which he may be interested, including its buying power, buying methods, character of requirements, etc. The volume, which is bound in cloth and contains nearly 500 pages, is published by G. D. Crain, Jr., 417 S. Dearborn Street, Chicago. The price is \$5. Orders in advance of publication are being accepted at the rate of \$3.75.

"SPECULATION AND THE CHICAGO BOARD OF TRADE"

With Governor Allen of Kansas raging against the Chicago Board of Trade as a "gambling den," and Senator Capper trying to put future trading out of business with a 10 per cent tax, we opened the book recently published by the MacMillan Company of New York, "Speculation and the Chicago Board of Trade" by James E. Boyle, to find out what it was all about. And we found out.

Mr. Boyle is Extension Professor of Rural Economy, College of Agriculture, Cornell University. He spent 20 years on a Kansas farm, and has been back every year for the 20 years since he left. He taught the subject of grain marketing at a state university for several years, and then made a first-hand study of country elevators and terminal markets for a period of two years. Evidently he knows his subject from every angle; that of the producer; the middleman; and, as he probably did not go without eating during those 40 years, the consumer.

The book is not written as a brief for this or that theory. It gives a picture of the operations of the Chicago Board of Trade and something of its history, and from these facts as a background he discusses the various theories with which the rural and political air is so highly charged right now. These phrases are in the mouths of all rural agitators and many politicians, and are given due attention: "Speculation means manipulation of the market"; "Speculation causes corners"; "Speculation lowers prices"; "Speculation is caused by future trading"; "Phantom Wheat"; "Speculation is gambling," etc.

In a sane, simple way Mr. Boyle dissects the error from the truth in these and many other questions, and gives a clearer idea of the great grain business of the country as it is handled today than any other exposition we have seen. There is a great deal of statistical data and other exhibits in the appendix which adds materially to the value of the volume. It is a book that should be read by every grain dealer and by those who have any interest in the economic principles underlying the distribution of our farm products. The price is \$2.50.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

MACHINERY

FOR SALE VERY CHEAP

A 100-ton 50-foot Fairbanks Railroad Track Scale, with all steel for setting same. All in perfect condition. C. E. BIRD & CO., Minneapolis, Minn.

CHEAP IF SOLD SOON

One second-hand No. 1 Oscillating Corn and Grain Cleaner, used less than two weeks. OHIO, Box 11, care "American Elevator and Grain Trade," Chicago, Ill.

FOR SALE

One stand of elevators complete, 66 feet high, with head and boot, legging, pulleys, belts and cups for 11x6 cups. THE PHILIP SMITH MFG. CO., Sidney, Ohio.

FOR SALE

Two No. 11800H Union Special Machine Company's Bag Patching and two No. 45 K 74 Singer Darning and Patching Machines. All in good operating condition. PURCHASING AGENT, P. O. Box 989, Buffalo, N. Y.

MOTOR FOR SALE

A 75-horsepower, G. E., three phase, 60 cycle, 220 volt, speed 900, like new. Cost \$1,500. Will sell for \$650. DAVIDSON MILL & ELEVATOR CO., Kansas City, Mo.

FOR SALE

One No. 0 Barnard's Improved Single Screen Corn Cleaner, with shaker. This machine is brand new, never having been used. We offer it at a real bargain. It is one of the best cleaners made and suitable for small grain as well as corn. HOLLISTER-WHITNEY CO., Quincy, Ill.

OIL ENGINE FOR SALE

60-horsepower Fairbanks-Morse.

50-horsepower Otto.

25-horsepower Fairbanks-Morse.

50 other sizes.

A. H. McDONALD, 550 W. Monroe St., Chicago, Ill.

ELEVATORS AND MILLS

WANTED

To hear from owner having elevator, mill or other property for sale. Give cash price and particulars. JOHN J. BLACK, Chippewa Falls, Wis.

FOR SALE

Seven Iowa elevators. Will handle 1,200,000 bushels this year. No crop failures. Price \$75,000. IOWA ELEVATORS, Box 12, care "American Elevator and Grain Trade," Chicago, Ill.

INDIANA ELEVATOR FOR SALE

Capacity 40,000 bushels. Steam power. All in good repair. No competition. In fine wheat, oats and corn country; on Pennsylvania Railroad. Good feed trade. ROSS & RICHARDS, R. F. D. 3, Ridgeville, Ind.

MILL FOR SALE

All new machinery and accessories for a complete sifter mill with a daily capacity of 30 to 35 barrels, ready for delivery. Results guaranteed. G. J., Box 11, care "American Elevator and Grain Trade," Chicago, Ill.

FOR SALE

A well-equipped 100-barrel flour mill within the city of Canton, Ohio. Water power. All new machinery. Can be bought at a very low price. For particulars, address THE O. C. BARBER ALLIED INDUSTRIES COMPANY, 308 Vicary Building, Canton, Ohio.

AN OPPORTUNITY

FOR SALE—MILL, ELEVATOR AND WAREHOUSE OF CONCERN NOW IN LIQUIDATION. Located in Corsicana, Texas, a town of 15,000 people with eight outlets by rail and interurban. A flourishing town in the center of the oil fields, with extensive cotton and grain interests.

Points of advantage to buyer are:

Excellent territory for feed and flour.

A bargain in values.

No other mill in the city.

Reasonable terms to buyer who convinces us of his responsibility.

H. A. HALBERT, JR., Trustee,
Box 135 Corsicana, Texas

MINNESOTA ELEVATOR FOR SALE

Capacity 200,000 bushels. Steam and electric power. In good condition. Excellent distributing point, transit privileges, on direct line from Minneapolis and St. Paul, five railroads; repair shops insure plenty of cars. Can be bought for less than 50 per cent of what material would cost today. MINNESOTA, Box 10, care "American Elevator and Grain Trade," Chicago, Ill.

BAGS

FOR SALE

Five thousand second-hand cotton grain bags, 16 oz., 25c each, f. o. b. St. Louis, in large or small lots. FOELL & CO., 123 Market St., St. Louis, Mo.

FOR SALE—BURLAP BAGS OF EVERY KIND

New or second-hand, plain or printed with your brand; seamless cotton grain bags; sample bags; burlap, cotton, sheeting, or paper for car lining, etc.

Wanted: Second-hand bags; best prices paid. WILLIAM ROSS & CO., 409 N. Peoria St., Chicago, Ill.

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

FOR SALE

One Lamson Wire Line Cash Carrier, practically as good as new; 50 feet or more between stations. Price furnished upon request. BOONVILLE MILLING COMPANY, Boonville, Ind.

FLOUR AND MILL FEEDS

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield, Ohio.

RAILROAD CLAIMS COLLECTED

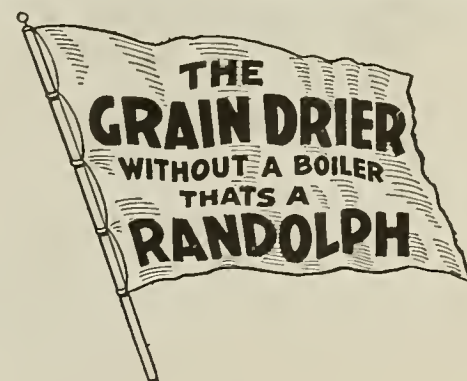
WE COLLECT RAILROAD CLAIMS covering loss or damage to grain, flour and mill products. Do not overlook delay, shortage, decline in market and deterioration claims. We have an extensive organization for handling these matters. References: Any Minneapolis bank or the Northwestern Miller. We are members of the Grain Dealers National Association and the Traffic Club of Minneapolis. This service is furnished on a percentage basis. No collection, no pay.

THE SECURITY ADJUSTMENT COMPANY,
1132-1156 Builders Exchange Bldg.,
Minneapolis, Minn.

HELP WANTED

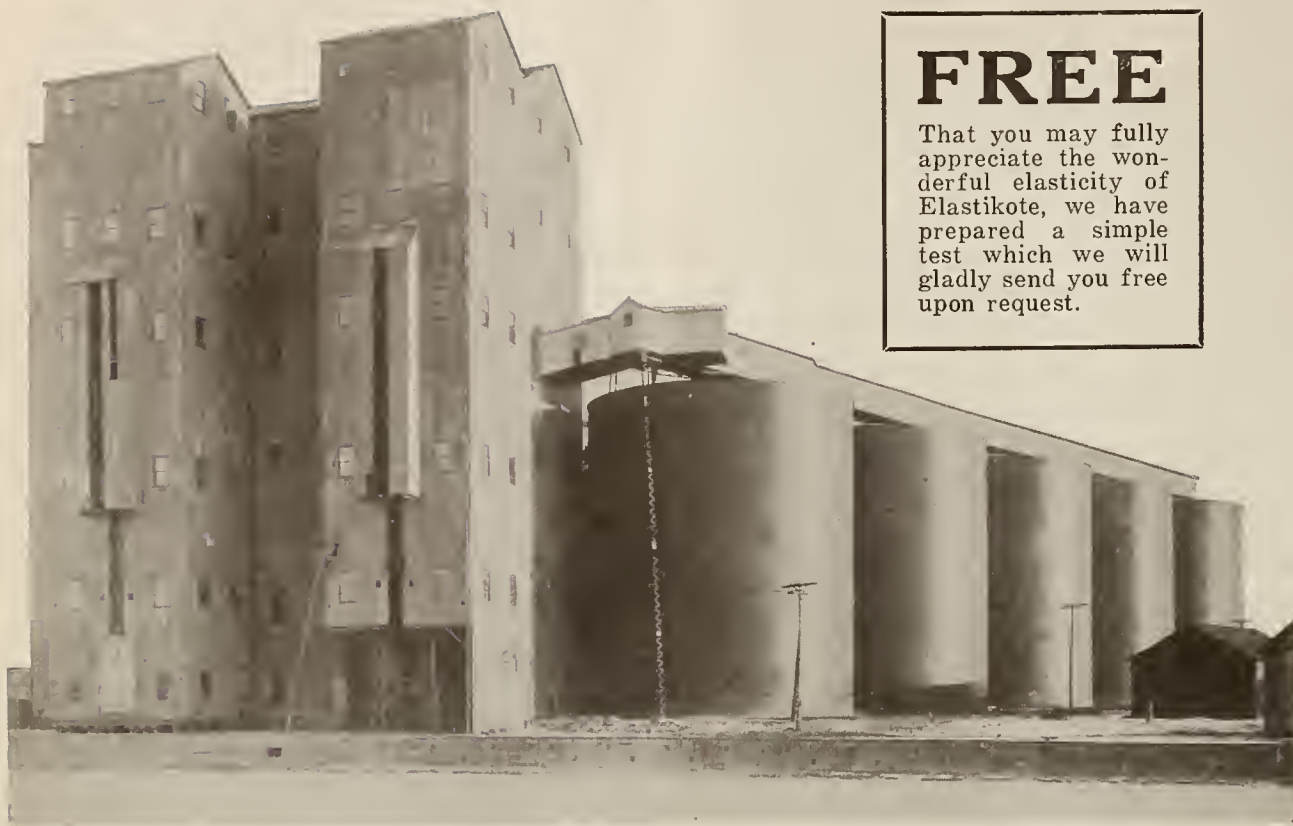
WANTED

Competent superintendent to run a dairy and poultry feed plant located practically in Chicago. Good opportunity for right man. In answering give your full experience. N. M. C., Box 12, care "American Elevator and Grain Trade," Chicago, Ill.



FREE

That you may fully appreciate the wonderful elasticity of Elastikote, we have prepared a simple test which we will gladly send you free upon request.



Safeguarding Metal Grain Tanks with TROPICAL ELASTIKOTE

If the surfaces of grain tanks and other metal work around elevators are not protected they rust and fall to pieces within a comparatively short time.

The Electric Elevator Co. of Buffalo, N. Y., has found Tropical Elastikote an ideal protective coating for its grain tanks.

Elastikote forms a waterproof film over metal. This film is elastic. It expands and contracts with the surface to which it is applied. Yet it clings tightly to the surface. It does not crack.

Thus it is impossible for moisture to creep through. Rust is prevented. Ex-

pensive replacements made necessary by rust are done away with.

Elastikote looks well! The most popular color—gray—harmonizes perfectly with concrete work. And it does not show dust nor dirt as easily as other shades.

Elastikote is economical. Every gallon covers an unusually large surface.

Safeguard your buildings! Write your name and address on this ad for your copy of "Tropical Paints for Grain Elevators."

THE TROPICAL PAINT & OIL CO., CLEVELAND, O.



TROPICAL

Paints—Enamels—Roofing Materials

Hay, Straw and Feed

(Continued from Page 506)

J. J. Bott is building a new warehouse and feed mill at Bevier, Mo.

The Ballard & Ballard Company has completed its new feed mill at Louisville, Ky.

The feed and fuel business of Frank Browner at Liberty, Mo., has been sold by him.

F. N. Benham has purchased the feed business of W. A. Ellison at Kingsville, Texas.

A feed mill is to be built at Glasgow, Va., after the first of the year by W. E. Rosser.

A concrete building has been erected at Indianapolis, Ind., for the Nowlin Feed Company.

C. L. Taylor Estate's feed and flour business at Canton, N. Y., has been purchased by Geo. Taylor.

C. Greensides of Georgetown, Ont., has disposed of his feed and flour business there to W. C. Bessey.

William Madison, A. W. Swanson and Mabel Madison have incorporated at Chicago, Ill., as the

West Chicago Feed & Flour Company, capitalized at \$30,000.

New grinding machinery is to be installed by the Capital Grain & Feed Company of Montgomery, Ala.

B. E. Ryan & Co., of Malone, N. Y., have been succeeded in the seed and flour business by Austin & Ryan.

To conduct a feed and flour business Watson, Sugrue & Co., have been incorporated at Manhattan, N. Y.

A feed and produce business has been opened in the McFarlin Building at Clovis, N. M., by A. B. Austin & Co.

Paul Strickland has leased the A. S. Cole Feed Mill at Medicine Lodge, Kan., and will conduct a feed and hay business.

J. H. McDonald, feed and flour merchant of Listowel, Ont., has sold his business to W. A. McDonald and C. M. Riggs.

The Slick Mill at Bloomington, Ill., has been purchased by the Illinois Feed & Elevator Company. The company will manufacture mixed feeds and will buy and ship grain. The company was recently incorporated and has a capital stock of \$125,000.

The company has offices at 974 Broadway, New York, and in the Chamber of Commerce, Boston, Mass.

The feed and flour business of Stoddard & Sarvey at Carthage, N. Y., has been purchased by the McDonald Milling Company.

A warehouse costing \$24,000 is being erected by the Archer-Daniels Linseed Company, feed manufacturers of Buffalo, N. Y.

D. S. Miller and L. L. Hassler has opened the Bonaparte Mill at Burlington, Iowa, and will conduct a feed and custom grinding business.

The feed and seed business at Antigo, Wis., conducted by F. W. Othersall and E. A. Yahr, has been purchased jointly by W. M. Bewick and Chas. McCandless.

The Little Rock, Ark., office of W. C. Nothorn, feed dealer, has been discontinued by him. Hereafter he will operate from his plant at Memphis, Tenn., only.

A feed mill has been opened at Centralia, Wash., by A. R. Badger. The plant will turn out both feed and flour. The specialty of the establishment will be poultry feeds.

The H. S. Masters Brokerage Company is succeeded in Kansas City, Mo., by the H. S. Masters Company. The company will deal in mill feeds, feedstuffs, grain and flour.

A branch office has been opened at Memphis, Tenn., by the Taylor Commission Company of Atlanta, Ga. The company deals in cottonseed meal cake, peanut meal and cake.

The mill and office building of the Frisby Feed & Fuel Company of Independence, Mo., is to be rebuilt. It burned recently with a loss of \$7,000. C. G. Frisby is president of the company.

Capitalized at \$25,000, the Buckeye Feed Company has been incorporated at Youngstown, Ohio. G. F. Hammond, J. Hoyt, A. Flannery, R. R. Stephenson and W. M. Hannon Jr., are interested.

The Chattanooga Feed Company of Chattanooga, Tenn., has completed the installation of machinery for grinding and mixing dairy, stock, hog and poultry feeds. The company will also grind corn meal.

W. T. Burns is now manager of the Omaha Alfalfa Milling Company of Omaha, Neb. He assumed his duties on December 1. For 15 years past Mr. Burns had been with the M. C. Peters Mill Company.

The Caseyville Flour & Feed Company has been incorporated at Belleville, Ill., capitalized at \$18,000. Wm. Price, Jos. H. Maisch, C. C. Mees, Henry J. Wedemeyer, J. Pausch, Jr., and Wm. H. Hueckel are interested.

The interests of Frank M. Purviance and S. H. Whitnack in the Abingdon Milling & Cattle Feeding Company at Abingdon, Ill., have been sold by them. They will erect a new mill at Galesburg, Ill., and manufacture feeds.

A plant of 200 tons meal and mixed feed capacity per day is to be erected at Monroe, La., for the Standard Gin Company. J. P. Parker, H. P. Marks and others are interested. The company will build and install machinery.

The Beacon Milling Company, manufacturers of dairy, stock and poultry feeds, with head offices at Auburn, N. Y., has taken A. E. Gutteridge of Chicago, into its organization. He will be vice-president and a director of the firm.

Work has been completed on the new plant of the Larowe Milling Company of Toledo, Ohio. The plant has capacity of 100 tons mixed feed; storage capacity of 35,000 tons beet pulp. The Leonard Construction Company had the contract.

A co-operative company has been organized at Greenville, Miss., for the Southern Realty Company with Lamar Watson manager. The company will build a feed mill and will grind alfalfa, oats and corn and mix into feed with molasses. The plant will cost from \$15,000 to \$20,000.

To conduct a general merchandising, commission and brokerage business in grain and grain products, the Burns Feed Corporation has been incorporated under New York State laws. The company will have offices at 819 Chamber of Commerce Building, Buffalo, under the efficient management of N. D. Callahan.

The Rogers Grain Products Company is to build a mixed feed plant at Belvidere, Ill. F. A. Rogers, J. O. Anderson and F. W. Boston are interested. The company is building a grain elevator and mixed feed mill of 200 tons daily capacity. F. A. Rogers is president of the company, which is capitalized at \$100,000.

The Mount McKay Feed Company, Ltd., is building a new plant at Ft. Williams, Ont. The plant consists of a small elevator and feed plant with floor space of 8,500 square feet and a capacity of 200 tons hay. The elevator capacity is 10,000 bushels; the output of the feed mill will be 20 tons per day. All kinds of chopped feeds and feed meal will be manufactured, with poultry supplies a specialty.

Elevator Machinery and Supplies**FLOUR and FEED MILL MACHINERY
STEAM and GAS ENGINES****PULLEYS, SHAFTING, GENERAL POWER TRANSMISSION
MACHINERY, ROLL GRINDING AND CORRUGATING****Largest Factory and Stock in Western Country**

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GREAT WESTERN MFG. CO.General Office and Factory
LEAVENWORTH, KAN.Warehouse and Sales Room
1400-1402 West 12th St.
KANSAS CITY, MO.**EAGLE "MIKADO"****PENCIL No. 174**

Regular Length, 7 inches

For Sale at your Dealer.

Made in five grades

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EAGLE PENCIL COMPANY, NEW YORK**RID-OF-RATS**

Patented, is Non-Poisonous and can be used anywhere without risk of killing house pets or injuring human beings. Eight years on the market. If your

dealer don't carry it, send direct to the manufacturers.

THE BERG & BEARD MFG. CO.

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Price \$1.80 per doz. boxes; \$1.00 per lb.

(Discount quoted upon request.)

We also manufacture a very effective Gopher Exterminator.

**GRAIN DUST
IS EXPLOSIVE,**
No One Disputes that
Fact.**How to Reduce Dust
Explosions**For Full Particulars
Write**CLARK DUST
COLLECTING CO.**

Fisher Bldg., Chicago, Ill.

FUMIGATION METHODS

By Prof. W. G. Johnson

A complete and practical treatise, fully
illustrated. PRICE, \$1.50.
Mitchell Bros. Pub. Co. - Chicago**Transit Leaks**

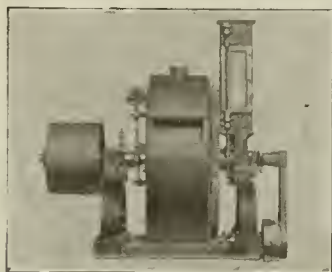
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**KENNEDY
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Enormous Increased Sales prove the Efficiency, Merit and Serviceability of these liners.

The Kennedy Car Liner

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BARLEY
PEPPER
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Use Triumph Pearlors if you want to produce pearled barley, or wheat, or pepper. They will turn out a product that cannot be beaten.

Full information gladly furnished to those interested.

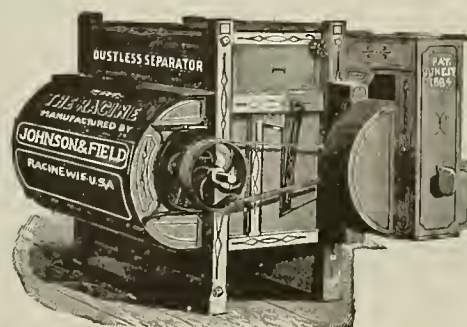
THE C. O. BARTLETT & SNOW CO.
Cleveland, Ohio**MILLERS' MUTUAL FIRE
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OF ILLINOIS**

Established 1878 Alton, Illinois

Insurance on Flour Mills and Elevator Properties.

Grain Insurance for short terms a Specialty.

CASH ASSETS - \$1,286,751.88

G. A. McKINNEY, Sec'y**HESS
GRAIN DRIERS
and CONDITIONERS****Moisture Testers
and Accessories****Dockage Sieves and
Scales****Emerson Kickers****Boerner Samplers****Bucket Testers and
All Kinds of Sampling
and Testing
Apparatus***Ask for booklets***Hess Warming and Ventilating Co.**
1210 Tacoma Bldg. Chicago**THE RACINE DUSTLESS SEPARATOR****YOUR PROFITS**CAN BE INCREASED IF
YOU RUN YOUR GRAIN
OVER OUR**Dustless Grain and Seed Separator**Special Screens for All Kinds
of Grain

Our Machines have probably brought higher grades to more country grain shippers than all other makes combined, saving the cost of each Machine many times in a season.

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KNICKERBOCKER "MADE-RIGHT"**For Flour, Cereals, Feeds,
Grains, Seeds, etc.Carry samples
conveniently, compactly,
in a practical manner.Display samples
attractively, quickly,
convincingly.Bringing bigger,
better orders.

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226-230 N. Clinton St.

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"The Rope that's true
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Hunt's
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Transmission Rope
Plumbago and
Tallow Laid

One trial will convince you of its greater economy in service.

Ask for sample to compare with that you are now using.

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Fabricated Steel Products

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GIBBS' PATENT DUST PROTECTOR
is invaluable to operatives in every industry where dust is trouble some, affording perfect protection with perfect ventilation. Thoroughly tested for many years in every kind of dust. Nickel-plated protector \$1.25. Canada \$1.50 post paid. Circulars free.

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50 wagon scales, capacity from 4 to 15 ton. Any size platform in following makes: Fairbanks, Howe, Buffalo, Standard and Columbia. Each scale that leaves our factory is thoroughly overhauled and tested and guaranteed to be correct. We furnish competent men for outside work.

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W. T. FRASER, Vice Pres. & Mgr.

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CHOICE MILLING WHEAT & RYE

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INTERESTS OF COUNTRY SHIPPERS
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Terminal elevator capacity
700,000 bushels. Oats for
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Terminal elevator capacity
250,000 bushels. Buyers and
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By PROF. WILLIS G. JOHNSON

A complete practical treatise on fumigating grain elevators, flour mills, warehouses, etc. 313 pages.
Well illustrated. Price \$1.50.

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ROPP'S CALCULATOR

A new and improved edition of this standard work, invaluable to grain dealers. Tables show at a glance the value of wheat, corn, rye, oats, barley, seeds, etc., at all market prices per bushel; also the weight reduced to bushels. Trade discounts, stock tables, capacity tables, short-cut arithmetic. Solves any problem in the twinkling of an eye. The grain tables alone make it indispensable to all who handle grain. Price \$1.50 postpaid.
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that the "American Grain Trade" is preserved for reference by elevator men, country grain shippers and grain receivers at the terminal markets long after other journals have been thrown away.

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ESTABLISHED 1872 R. S. McCAGUE, Ltd. Wholesale Receivers and Shippers Corn, Oats, Hay and Mill Feed 417-419 Westinghouse Bldg. Pittsburgh, Pa.	Reference: Farmers Deposit National Bank SAMUEL WALTON CO. Receivers and Shippers of HAY, GRAIN & MILL FEED Advances on Consignments CARLOADS ONLY No. 8 Wood Street PITTSBURGH, PA.	GEO. E. ROGERS & CO. <i>Receivers and Shippers</i> Grain, Hay, Flour and Mill Feed <i>Experience—Years of it</i> TRY US ON THAT NEXT CAR 801 Wabash Bldg. PITTSBURGH, PA.

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Like Billy Sunday, we deal in both
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*Shippers (a Specialty)*Milling Wheat, Kaffir Corn
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Randall & Co., T. D., hay and straw.
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Rumsey & Co., grain commission.*
Sawyers Grain Co., grain commission.*
Schifflin & Co., Philip H., com. merchants.*
Shaffer, J. C., & Co., grain merchants.*
Simons, Day & Co., grain, stocks, bonds.*
Updike Grain Co., consignments.
Wagner & Co., E. W., receivers, shippers.*
Wegener Bros., grain commission.*

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Brouse-Skidmore Grain Co., rec. & shipper.*†

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Cleveland Grain & Milling Co., receivers and shippers.*†
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Ady & Crowe Mercantile Co., grain, hay, beans.*†

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Baldwin & Co., H. I., grain brokers.*

*Members Grain Dealers' National Association.

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Blair Elevator Corporation, grain merchants.
Des Moines Elevator & Grain Co., grain merchants.*
Mid-West Consumers' Grain Co., grain merchants.*
Taylor & Patton Co., grain merchants.*

DETROIT, MICH.

Dumont, Roberts & Co., receivers, shippers.*

DULUTH, MINN.

White Grain Co., grain and hay.*†

GREENSBORO, N. C.

Moon-Taylor Co., grain, feed and hay brokers.*†

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Boyd Grain Co., Bert A., grain commission.*
Evans Grain Co., Wm. R., grain merchants.*
Hayward-Rich Grain Co., commission and brokerage.*
Kinney, H. E., Grain Co., grain, hay, feed.*†
McCardle-Black Co., grain commission.*
Merchants Hay & Grain Co., grain and hay.*†
Steinhart Grain Co., grain commission.*
Urmston Grain Co., grain commission.*†
Witt, Frank A., grain commission and brokerage.*

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Davis Grain Co., A. C. grain commission.
Larabee Flour Mills Corp., millers of "Larabee Best."
Moore-Lawless Grain Co., grain receivers.*
Moore-Seaver Grain Co., corn and oats.*
Peppard Seed Co., J. G., alfalfa seed, millet.
Thresher Fuller Grain Co., commission.*
Watkins Grain Co., consignments.*
Western Grain Co., shippers grain and feed.*

LANCASTER, PA.

Eby & Sons, Jonas F., receivers and shippers.*†

LIMA, OHIO.

Hurley Buchholtz Co., wholesale grain, hay, straw.*†

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Edinger & Co., grain, hay, feed.*†
Farmer & Sons, Oscar, grain, hay, feed.*†

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Wilson Co., Jno. R., corn, oats, mill feeds.

LYNCHBURG, VA.

Moon-Taylor Co., grain, feed and hay brokers.*†

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McRae, Duncan L., flour, grain, provisions.*

MEMPHIS, TENN.

Browne, Walter M., grain, hay, mill feed.*
Jones, Lee D., grain dealers.*
U. S. Feed Co., receivers and shippers.*†

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Pollock Grain Co., wholesale grain, hay.*

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Courteen Seed Co., seeds.
Donahue-Stratton Co., buyers and shippers.*
Flanley Grain Co., grain.
Franke-La Budde Grain Co., receivers and shippers.*
Kamm Co., P. C., grain merchants.*
Milwaukee Seed Co., seed.*
Mohr-Holstein Commission Co., grain com.*
North American Seed Co., seed.
Taylor & Bournique Co., corn, oats, barley.*

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Godfrey Grain Co., grain commission.*
McCaull-Dinsmore Co., com. merchants.*
Quinn, Shepherdson Co., grain merchants.*
Scroggins Grain Co., The, wheat shippers.*

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Alabama products.*
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Hopper & Co., H. M., grain, millfeeds, hay brokers.*

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Forbell & Co., L. W., com. merchants.*
Nungesser-Dickinson Seed Co., seeds.
Power & Co., W. D., hay, straw, produce.*†

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Moon-Taylor Co., grain, feed and hay brokers.*†

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Maney Grain Co., receivers and shippers.*

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Cole Grain Co., Geo. W., grain receivers.*
Conover Grain Co., E. B., receivers, shippers.
Dewey & Sons, W. W., grain commission.*
Luke Grain Co., grain commission.*
Miles, P. B. & C. C., grain commission.*†
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Turner-Hudnut Co., grain commission.*
Warren Commission Co., consignments.*

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Miller & Sons, L. F., receivers and shippers.*†
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Young & Co., S. H., grain, flour and feeds.

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Rogers & Co., Geo. E., receivers & shippers.*†
Walton Co., Samuel, hay, grain, mill feed.*†

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Nanson Commission Co., receivers, shippers.*†
Picker & Beardsley Com. Co., grain, hay.*†
Powell & O'Rourke Grain Co., receivers, shippers, exporters.*
Prunty, Chas. E., grain and seeds.*
Schultz & Niemeier Com. Co., receivers and shippers.*
Seele Bros. Grain Co., commission.*
Toberman, Mackey & Co., grain, hay, seeds.*†
Turner Grain Co., grain commission.*

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Lloyd & Co., John H., grain merchants.*

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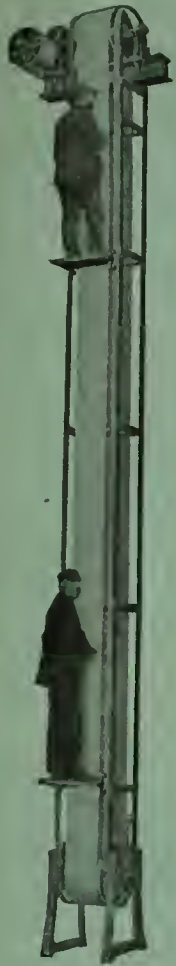
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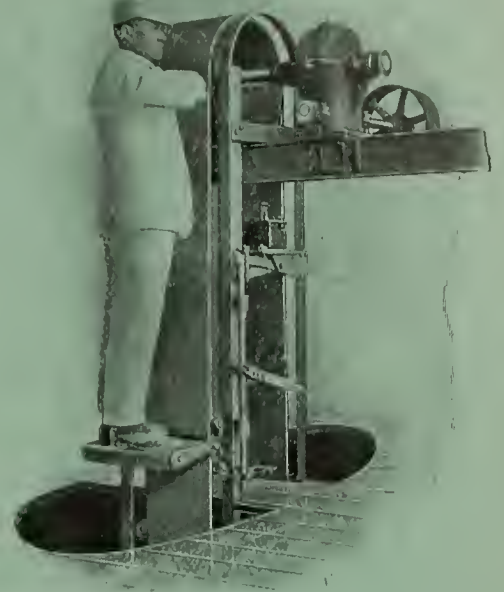
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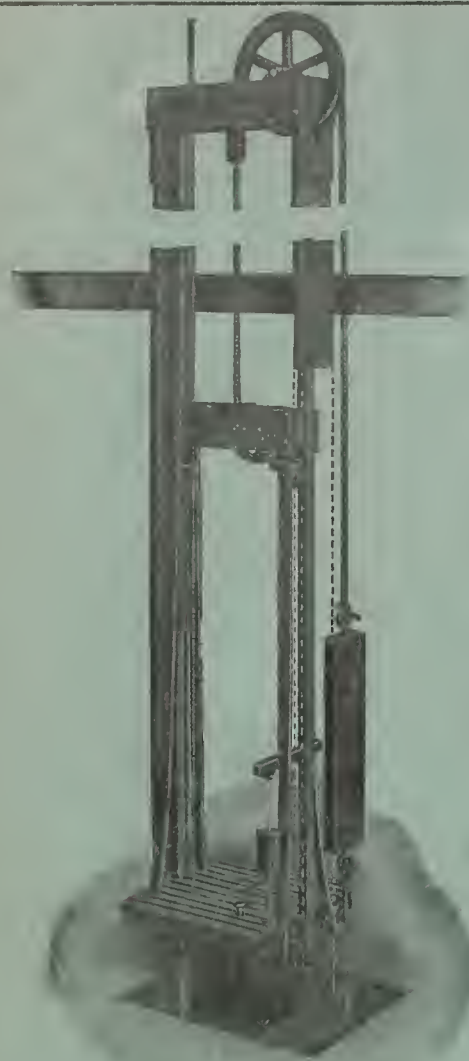
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